

Promoting agriculture amongst the black youth of South Africa: the role the sector has to play in creating employment, alleviating poverty, and achieving equitable economic growth.

by

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Declaration

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Date: March 2020

Abstract

The persistence of rural and urban poverty, the renewed interest in agriculture and a sense of urgency regarding employment for young people have joined in the minds of policy makers and development professionals, to the point where the agricultural sector has become one of the key sectors to look for answers to the crisis of youth unemployment. Unemployment and poverty are major problems faced by developing countries such as South Africa. The problem becomes more severe when it affects the youth more than the elderly, as the youth are the future of any country. The black youth of South Africa are highly impoverished and are unemployed. High unemployment, especially amongst the youth, and high levels of poverty in the midst of the poor economic growth that South Africa has been experiencing, indicates that there has been no inclusive growth in South Africa and the society remains highly unequal.

The agricultural sector is a sector that the black youth (and youth at large) do not consider capable of helping them out of their poverty and unemployment woes. The truth of the matter is that the agricultural sector is more than capable of creating decent employment (and self-employment) and alleviating poverty for the black youth of South Africa. In pursuing economic growth and with most well-paying jobs being in the urban areas (resulting in urbanisation), the agricultural sector and rural economies should not be neglected. Instead, South Africa should ensure that the agricultural sector and rural economies are developed concurrently so that the queue of the urban unemployed is reduced and people find decent employment within the agricultural sector in the rural economies. Through sound infrastructure, the agricultural sector does not just remain in the rural economy and primary sector, it also forms part of the urban economy and secondary sector (agro-processing). This is an imperative link for any economy as the narrative changes: from rural dwellers flooding the urban areas in order to obtain low-paying jobs and staying in urban slums (shacks) on the outskirts of the urban area, to rural dwellers merely being in the urban area because of their movement within the agricultural value chain (from primary production to agro-processing).

This would ensure that poverty within the urban areas, which is often overlooked when certain statistics surveys are being conducted, is also dealt with. There are many unemployed and impoverished people living in urban areas because the chances of getting decent employment is higher in urban areas than rural areas. What is of great concern is that from an agriculture perspective, the rural areas with arable land are left desolate because there is no one there to work the land.

This paper's focus is twofold; firstly, it focuses on the importance of youth participation in the agricultural sector, given the sector's importance in equitable economic growth, and then it looks at policies and processes that are needed to address this problem.

A questionnaire, which was focused on ascertaining the view that the youth of South Africa have of the agricultural sector, was drawn up and completed by youths across all races and genders. Regarding the geographical location of the respondents, they were from three provinces: Gauteng, the Eastern Cape and the Western Cape. The results obtained from the questionnaire indicate that black youth do not have an interest in agriculture and that they are not aware of the various career opportunities that exist in the sector.

It is evident that the required shift in the minds of the youth will not happen overnight and, in the interim, poverty and unemployment remain prevalent amongst the black youth. However, it must be stressed that there are indeed many youths succeeding in agriculture – across the entire value chain. In the short term, more needs to be done regarding showcasing these success stories across all media platforms, not only for the youth, but more importantly for key stakeholders (e.g. development finance institutions, banks, agribusinesses, etc.) in the agricultural sector to take notice and play their part to empower the youth that are keen to become involved in agriculture.

In the medium to long term, the departments of agriculture and of education (basic and higher) needs to invest in including agriculture in the syllabus of all public and private schools, and not just in the few dedicated agricultural schools in the country.

Opsomming

Die volharding van landelike en stedelike armoede, die hernude belangstelling in die landbou en 'n sin van dringendheid met betrekking tot werksverskaffing aan jongmense is in die denke van beleidmakers en professionele ontwikkelaars verenig, in so 'n mate dat die landbousektor een van die sleutelsektore geword het in die soeke na antwoorde op die krisis van werkloosheid onder jongmense. Werkloosheid en armoede is vername probleme in ontwikkelende lande soos Suid-Afrika. Die probleem raak erger wanneer dit die jeug meer as ouer mense affekteer, aangesien die jeug die toekoms van enige land uitmaak. Die swart jeug van Suid-Afrika is hoogs verarm en is werkloos. Hoë werkloosheid, veral onder die jeug, en hoë vlakke van armoede te midde van die swak ekonomiese groei wat Suid-Afrika ervaar, dui daarop dat daar geen inklusiewe groei in die land was nie en dat die samelewing baie ongelyk bly.

Die landbousektor is 'n sektor wat die swart jeug (en die jeug oor die algemeen) nie beskou as een wat hulle uit hulle armoede en werkloosheid kan lig nie. Die waarheid is egter dat die landbousektor meer as bekwaam genoeg is om ordentlike werk (en selfwerksaamheid) te skep en om armoede onder die swart jeug van Suid-Afrika te verlig. In die nastreef van ekonomiese groei en omdat die meeste werksgeleenthede in die stedelike gebiede is (wat lei tot verstedeliking), moet die landbousektor en landelike gebiede nie verwaarloos word nie. In plaas daarvan moet Suid-Afrika verseker dat die landbousektor en landelike gemeenskappe gelyktydig ontwikkel word sodat die rye stedelike werkloosheid verminder word en mense ordentlike werk in die landbousektor in landelike ekonomieë verkry. Deur middel van goeie infrastruktuur sal die landbousektor nie net in die landelike ekonomie en primêre sektor bly nie, maar sal dit ook deel vorm van die stedelike ekonomie en die sekondêre sektor (landbou-verwerking). Dít is 'n noodsaaklike skakel vir enige ekonomie soos die narratief verander: vanaf plattelandse bewoners wat die stedelike gebiede invaar om lae-betalende werk te kry en in stedelike krotbuurte (plakkershutte) te woon, tot plattelandse bewoners wat slegs in die stedelike gebiede is vanweë hulle beweging binne die landbou-waardeketting (vanaf primêre produksie tot landbou-verwerking).

Dit sal verseker dat armoede in stedelike gebiede, wat gereeld oor die hoof gesien word wanneer sekere statistiese opnames gedoen word, ook in ag geneem word. Daar is baie werklose en verarmde mense in stedelike gebiede omdat die kanse om ordentlike werk te kry, groter is in stedelike as in landelike gebiede. Wat groot kommer wek is dat, vanuit 'n landbou-perspektief, die landelike gebiede met bewerkbare grond verlate bly omdat daar niemand is om die land te bewerk nie.

Hierdie studie fokus op twee aspekte: eerstens, die belangrikheid van deelname deur die jeug in die landbousektor, gegewe die sektor se belangrikheid in billike ekonomiese groei, en dan kyk dit ook na beleide en prosesse wat benodig word om hierdie probleem aan te spreek.

'n Vraelys wat gefokus het op die vasstelling van die Suid-Afrikaanse jeug se sienings van die landbousektor is opgestel en voltooi deur jongmense van alle rasse en geslagte. Met betrekking tot die geografiese ligging van die respondente was hulle afkomstig van drie provinsies: Gauteng, die Oos-Kaap en die Wes-Kaap. Die resultate van die vraelys toon dat die swart jeug nie in die landbou belangstel nie en dat hulle nie bewus is van die verskillende loopbaangeleenthede wat in die sektor bestaan nie.

Dit is duidelik dat die vereiste skuif in die denke van die jeug nie oornag sal plaasvind nie en armoede en werkloosheid sal dus in die interim algemeen bly onder die swart jeug. Dit moet egter benadruk word dat daar wel baie jongmense is wat sukses behaal in die landbou – oor die hele waardeketting heen. In die korttermyn moet meer gedoen word om hierdie sukses stories op alle mediaplatforms te vertoon – nie net vir die jeug nie, maar belangriker nog dat sleutelbelanghebbers (bv. instellings wat ontwikkelingsfinansiering verskaf, banke, landboubesighede, ens.) in die landbousektor kennis neem en hulle rol speel om die jeug te bemagtig wat gretig is om in die landbou betrokke te raak.

In die medium- tot langtermyn moet die departemente van landbou en van onderwys (basies en hoër) daarin belê om landbou in die sillabus van alle openbare en privaatskole in te sluit, en nie net in die paar toegewyde landbouskole in die land nie.

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Chapter 1: Introduction

This chapter introduces the dissertation topic and the motivation behind the topic. The objective and the outline of the dissertation is also looked at.

1.1. The motivation for the study

Global economic growth is expected to slow down to 2.9% in 2019 from 3% in 2018 due to trade tensions (Global Economic Prospects, 2019:3). China's growth is expected to decline following a combination of needed regulatory tightening to rein in shadow banking and an increase in trade tensions with the United States. Developing economies are expected to experience stalled economic growth, with the 2019 forecast at 4.2%, the same as 2018 (Global Economic Prospects, 2019:20). South Africa forms part of the emerging markets and developing economies but the outlook for South Africa's economic growth is a lot less favourable compared to that of its counterparts, with South Africa's economic growth forecasted at just 1.3% for 2019, slightly up from 0.9% in 2018 (Global Economic Prospects, 2019:25).

The South African Reserve Bank (SARB) is more positive than the World Bank, estimating South Africa's economic growth for 2019 at 1.7%. Among the inhibiting factors, political uncertainty is top of the list-resulting in policy confusion and poor economic performance in the country (BMI Research, 2018). Continued unemployment (especially amongst the youth¹), sluggish credit growth, and general structural headwinds also add to the subdued economic growth forecasts for South Africa.

In order to be considered unemployed, based on the official definition in South Africa, three criteria must be met simultaneously: a person must be completely without work, currently available to work, and taking active steps to find work. The expanded definition excludes the requirement to have taken steps to find work (Stats SA, 2018).

South Africa's youth unemployment remains a major issue, with the unemployment rate at 51.1% as of the third quarter of 2018 (Stats SA, 2018)². Using the expanded definition of unemployment, the youth unemployment rate increases to 63.9% (Stats SA, 2018). Poor economic growth and an ill-functioning education system are the main reasons for the high youth unemployment rate. The unemployment rate among the youth is also higher irrespective of education level. The graduate unemployment rate was 33.5% for those aged

¹ The South African National Youth Policy defines youth as any persons between the ages of 14 and 35 years. This is a very broad definition of youth (The Presidency of the Republic of SA, 2015).

² This youth unemployment rate refers to the people in the 15-24 years bracket, which is the same bracket used on a global scale by the International Labour Organization.

15–24 and 10.2% among those aged 25–34 years, while the rate among adults (aged 35–64 years) was 4.7%. Just over 30% of the youth have jobs and about half of them participate in the labour market. Within the youth, those aged 15–24 years are more vulnerable in the labour market with an unemployment rate of 51.1%, as mentioned before, an absorption rate of about 12.2% and a labour force participation rate of 25.6% (Stats SA, 2018).

On the global front, youth unemployment is not expected to change from 2018, remaining at 13% in 2019 (13% in 2017 and 13% in 2016), translating to roughly 71 million young unemployed people around the world (International Labour Organization (ILO) 2017:14). The European youth has been experiencing a decline in unemployment since 2013 and the trend is likely to continue, while the Latin American and Caribbean youth continue to grapple with unemployment. Sub-Saharan Africa (SSA), and Eastern and Southern Asia are likely to see their youth unemployment rates remain flat in the near future (ILO, 2017:14).

When the youth does manage to find employment, the quality of the jobs that they obtain remains a major concern-with 16.7% of young workers living on less than \$1.90 a day, below the extreme poverty threshold, meaning that they are working in poverty (ILO, 2017:14).

“SSA continues to report the highest youth working poverty rates globally, close to 69 per cent in 2017. In spite of a decline of more than 7 percentage points since 2007, the number of sub-Saharan youth in working poverty increased by more than 10 million in the past decade, to 65.8 million, more than in any other region of the world” (ILO, 2017:33).

South Africa’s moderate economic growth outlook indicates that the problem of unemployment, more especially youth unemployment, is going to remain a major issue going forward. What is of major concern is that the already marginalized group of young black people are the most vulnerable to these unfavourable economic conditions. When a developing nation such as South Africa is faced with high unemployment this translates into high rates of poverty and inequality among those highly affected: in this case it is the young black people.

Since 1994, South Africa has made undeniable progress in opening the economy and alleviating poverty across a number of critical areas. On the political front, democratic institutions are well established, and the “re-invention” of government, which is continuing through the creation of new tiers of government (provincial and local), has changed the environment for governance and service delivery. On the economic front, the government has pursued policies that have restored and maintained macroeconomic stability in the context of a difficult global environment.

But despite these areas of success, there exists a widespread perception that South Africa's economic performance since 1994 has been disappointing. The key objectives of poverty reduction and improved service delivery remain largely unmet. The National Treasury, which is responsible for managing South Africa's national government finances, has a critical role to play regarding poverty alleviation and employment creation in South Africa. The way poverty is defined is critical for any country, because if a developing nation defines poverty the way a developed nation defines it, there will be major mismatches and many people will end up suffering in that particular developing nation. South Africa's National Treasury (2007:5) states that;

"Poverty is a contested concept; and it is contested with good reason. Arguments over how poverty should be conceptualised, defined and measured go beyond semantics and academic hair-splitting. The conceptualisation, definition and measurement of poverty in a society is like a mirror-image of the ideals of that society: in conceptualising, defining and measuring what is unacceptable in a society we are also saying a great deal about the way we would like things to be. It is therefore vital that the concepts, definitions and measurements of poverty, as well as being theoretically robust, are appropriate to the society in which they are applied."

There are a number of ways in which to measure poverty, but a key distinction is between an absolute versus a relative approach. Absolute measures of poverty define a minimum threshold for living conditions, and individuals who fall below that threshold are considered poor. Poverty can also be measured in a relative sense. For example, individuals who fall into the bottom 20% of the income distribution might be considered poor. On the other hand, the poor could be defined as those whose incomes fall below 50% of the population's median income (Hirschl and Rank, 2015:3).

In 2012, South Africa published a set of three national poverty lines – the food poverty line (FPL), the lower-bound poverty line (LBPL) and the upper-bound poverty line (UBPL) – to be used for poverty measurement. The FPL is the level of income below which individuals are unable to purchase sufficient food to provide them with an adequate diet. Those below this line are either consuming insufficient calories for their nourishment, or must change their consumption patterns from those preferred by low-income households. The LBPL includes non-food items, but requires that the individuals sacrifice food in order to obtain these, while individuals at the UBPL can purchase both adequate food and non-food items (Stats SA, 2014b). The rand value of each line is updated every year using the Consumer Price Index (CPI) price data. In 2007, Stats SA was officially tasked by government to conceptualise, consult widely and develop a national poverty line for the statistical reporting of poverty in

South Africa. In developing the national poverty line, Stats SA used an internationally recognised approach, namely the cost-of-basic-needs approach, which links welfare to the consumption of goods and services. The line was constructed as a combination of two parts, which are the food and the non-food components. Unless stated otherwise, it can be assumed that this is the approach used when poverty is mentioned throughout this paper.

On the 3rd of April 2014, Stats SA released a publication that reported on the poverty trends in South Africa from 2006 up until 2011. The proportion of the population living below the UBPL in South Africa had decreased from 2006 up until 2011. This is noteworthy, bearing in mind that there was a global recession in 2008. In 2006, more than half of the population was living in poverty, 57.2% to be exact, and by 2011 the figure dropped to 45.5% (Stats SA, 2014b).

Although there has been a decrease, a figure of 45.5% of people living in poverty is still very high. South Africa's counterpart in the BRICS (Brazil, Russia, India, China and South Africa) association, Brazil, has made tremendous progress in poverty alleviation in the country. "Between 2003 and 2009, 28 million people escaped from poverty in Brazil, and between 2003 and 2011 the middle class absorbed 40 million of Brazil's 190 million people" (OECD, 2014). President Dilma Rousseff's administration has launched a new programme, Brazil Without Poverty, which embraces three areas of activity: it seeks to provide greater access to public services, covering food and nutritional security, education, health and social assistance, among other areas; it offers income guarantees; and it aims to equip people living in both the cities and the countryside with the skills and education they need to take on a full role in the economy. The goal is to improve living conditions for the extremely poor by breaking the cycle by which poverty reproduces itself (OECD, 2014). The brief comparison between South Africa and Brazil illustrates that South Africa can definitely do more than the social wage with regard to increasing the income of the poor. The government needs to make a concerted effort in order to ensure that those that are dependent on social grants do not do so indefinitely-policy recommendations in chapter 6 will divulge further into this statement.

High unemployment, especially amongst the youth, and high levels of poverty in the midst of economic growth, even at the current slow rate, indicate that the growth that South Africa has been able to achieve has not been inclusive. Inclusive growth is defined as growth that reduces high levels of poverty and inequality, that is sustained, and that raises the income and quality of life of all citizens. In essence, inclusive growth incorporates economic growth that benefits every single person in the economy so that their basic income also improves.

South Africa has clearly not achieved inclusive growth over the years, as high levels of inequality and poverty persist.

At the Millennium Summit in September 2000, the largest gathering of world leaders in history adopted the United Nations (UN) Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty and setting out a series of time-bound targets, with a deadline of 2015. These targets are known as the Millennium Development Goals (MDGs). Table 1 below illustrates how South Africa compares to other BRIC member countries and Singapore in relation to these goals. The United States of America has been chosen because of its first world status, so as to illustrate the gap between the BRICS countries (which are mostly mixed economies-elements of first and third world), a first world country, and the world average.

Criteria	SA	Brazil	China	Russia	India	United States of America	World
No access to electricity (2012 numbers)	14%	0.50%	0%	0%	22%	0%	15%
Lack of improved water source	7%	2%	5%	3%	6%	0%	9%
No access to basic sanitation	33%	17%	23%	28%	60%	0%	27%
Number of homeless people	13%	14%		3.50%	6%	0.00%	
Internet users (% of population)	51%	59%	50%	73%	26%	89%	44%
Unemployment rate (2014)	25%	7%	4.70%	5%	4%	6%	5%
Gini coefficient	63	53	46	42	35	42	
Population in 2015	55_m	207_m	1.3_b	144_m	1.3_b	321 m	7_b

Table 1: How South Africa compared on key Millennium Development Goals (United Nations, 2015).

Following the lapsing of the initial MDGs, the 2030 Agenda for Sustainable Development, also set out by the UN as a continuation of the MDGs, calls on countries to begin efforts to achieve the 17 Sustainable Development Goals (SDGs) over the next 14 years. The goals address the needs of people in both developed and developing countries, emphasising that no one should be left behind. The SDG agenda addresses the three dimensions of sustainable development: social, economic and environmental, as well as important aspects related to peace, justice and effective institutions. The 17 SDGs are seen in Table 2 below. The aggressiveness of the SDGs can be seen by looking at goals 1 and 2, in which it is stipulated that there should be zero poverty and zero hunger by 2030.

South Africa along with other developing and developed nations, has committed to achieving these goals by 2030. According to Stats SA (2018) 49.2% of South Africans are impoverished according to the national poverty lines. An overwhelming majority of these poor people live in rural areas. In the South African context, the decline of smallholder agricultural activity in rural areas during the 20th century was driven by racialized land dispossession and underdevelopment in order to meet the labour demands of industrial capital (Neves and Du Toit, 2013:3). Presently, rural areas are still undergoing a process of de-agrarianisation due to rural households' dependence on government grants and the cash transfers from urban to rural areas. The poor infrastructure in rural areas, the lack of knowledge and capital to enable farming to be more profitable in the rural areas, and the poor wages and general income (even as a farmer and not an employee) compared to other sectors, all deter the rural population from participating in agriculture in the rural areas. Nonetheless, in the midst of this, agrarian activities, as constrained as they are, are still the main economic activity in the rural areas of South Africa.

Given the abovementioned, agriculture definitely has a vital role to play in alleviating poverty and creating employment in a developing nation such as South Africa.

Sustainable Development Goals		
1	No poverty	1/5 of people are still living on less than \$1.25 a day, and the UN has called for complete poverty alleviation.
2	Zero hunger	The food and agriculture sector offers key solutions for development, and is central in hunger and poverty eradication.
3	Good health and well-being	Ensuring healthy lives and promoting the well-being for all at all ages is essential for sustainable development.

4	Quality education	Obtaining a quality education is the foundation for improving people's lives and sustainable development.
5	Gender equality	Providing women and girls with equal access to education, health care and decent work, and representation in political and economic decision-making processes, will fuel sustainable economies and benefit societies and humanity at large.
6	Clean water and sanitation	Clean, accessible water for all is an essential part of the world we want to live in. There is sufficient fresh water on the planet to achieve this.
7	Affordable and clean energy	Energy is central to nearly every major challenge and opportunity the world faces today. Sustainable energy will transform lives, economies, and the planet.
8	Decent work and economic growth	Roughly half of the world's population still lives on the equivalent of \$2 a day. In many places, having a job does not guarantee the ability to escape from poverty.
9	Industry, innovation, and infrastructure	Investment in infrastructure – transport, irrigation, energy, and information and communication technology – is crucial to achieving sustainable development and empowering communities in many countries.
10	Reduced inequalities	Inequality still persists and large disparities remain in access to health and education services and other assets.
11	Sustainable cities and communities	Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically.
12	Responsible consumption and production	Sustainable consumption and production is about promoting resource and energy efficiency and sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all.
13	Climate action	Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of

		other measures that will reduce emissions and increase adaptation efforts.
14	Life below water	Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation.
15	Life on land	Forests cover 30% of the Earth's surface and, in addition to providing food security and shelter, forests are key to combating climate change, protecting biodiversity and the homes of the indigenous population. Thirteen million hectares of forests are being lost every year, while the persistent degradation of drylands has led to the desertification of 3.6 billion hectares.
16	Peace, justice, and strong institutions	Goal 16 of the Sustainable Development Goals is dedicated to the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels.
17	Partnerships for the goals	A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships, built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level.

Table 2: Sustainable Development Goals for 2030 (United Nations, 2015).

1.2. The objectives of the study

Historically, few issues have attracted the attention of development economists as much as the role of agriculture in economic development and poverty reduction, generating a body of literature comprising both theoretical and empirical studies. The objective of this study is to firstly illustrate the importance of the agricultural sector in equitable economic growth and thus the importance of youth participation in the agricultural sector, and then it also looks at policies and processes that are needed to address this problem.

The high unemployment rate amongst South Africa's youth amidst jobless economic growth calls for a mix of policy tools and levers to create opportunities for this demographic and to take advantage of new and neglected markets. There are various factors that contribute towards the high youth unemployment (especially among the black youth) mainly socio-economic inequality, an inadequate education system, and jobless growth in South Africa (Oluwajodu, Blaauw, Greyling, and Kleynhans, 2015).

The unemployment rate amongst black people in South Africa is 31.1%, 4% higher than the national unemployment rate (Stats SA, 2018). The situation is dire when looking at the black youth, where 60% of young black people aged between 15 and 24 years are unemployed. The unemployment rate of the black youth aged between 25 and 34 years is 37% (Stats SA, 2018). Many young people in developing countries find themselves in informal sector jobs with few prospects and earning below the minimum wage. In South Africa, one of the main contributing factors to this dire situation that the youth find themselves in, is a poorly managed education department (Turok, 2012).

The strong legacy of apartheid and the correlation between education and wealth have meant that, generally speaking, poorer learners in South Africa perform worse academically. The schools that predominantly served white learners under apartheid have remained functional (although now racially mixed), while the majority of those which served black learners remain dysfunctional and unable to impart the necessary numeracy and literacy skills to learners (Shay, 2016). The poor quality of education that learners receive helps drive an intergenerational cycle of poverty where children inherit the social standing of their parents or caregivers, irrespective of their own abilities or effort. There is a widespread consensus in local and international literature that the quality of education that a learner receives plays a central role in determining the type of job that the learner will get and how much they will earn in the labour market (Odusola, 2017). This phenomenon is prevalent in South Africa's agricultural sector as well, with a large number of professional agricultural jobs left vacant each year because there are not enough people with the suitable qualifications to fill the jobs (Kriel, 2015).

The persistence of rural poverty, the renewed interest in agriculture and a sense of urgency regarding employment for young people have joined in the minds of policy makers and development professionals, to the point where the agricultural sector has become one of the key sectors to look for answers to the crisis of youth unemployment (Bernard and Taffesse, 2012).

A shift in focus toward fostering the agricultural sector among youths could be one of the most effective means to mitigate both unemployment and poverty in South Africa.

Cervantes-Godoy and Dewbre's (2010) working paper on behalf of the Organisation for Economic Co-operation and Development (OECD) had the objective of answering this simple question: why are some countries doing better than others? The paper looked for shared characteristics among 25 developing countries posting extraordinary success in reducing extreme poverty over the past 20 to 25 years. These countries were compared using indicators of their macroeconomic characteristics and, especially, their agricultural economic characteristics. Agriculture was observed to have played a critical role in poverty reduction in the countries that formed part of the study.

Pro-poor growth, which is growth that benefits poor people in absolute terms as reflected by the different measures of poverty, is a necessity in South Africa. Pro-poor growth has been identified as one of the most favourable pathways to accelerate poverty reduction in developing countries. The diagnostic pro-poor growth toolbox is a tool that has thus far, focused on the income dimension as well as key non-income achievements in education and health (Klasen and Reimers, 2016). Through the extension of the diagnostic pro-poor growth toolbox³ Klasen and Reimers' (2016) paper looked at the importance of agricultural productivity for poverty reduction in developing countries. Klasen and Reimers (2016) then expanded the toolbox to include the differentiation between land productivity and labour productivity amongst the poor⁴. The expanded toolbox was applied to 3 comparable household surveys in Rwanda, (1999-2001, 2005-2006, and 2010-2011) a country that has taken notable measures to increase agricultural productivity and improve the population's access to social services.

"The new tools reveal that the land productivity-poor experienced pro-poor growth in the relative (and absolute) sense while the labour productivity-poor increased their labour productivity relatively (but not absolutely) faster than the labour productivity-rich even though the former have considerably lower education levels" (Klasen *et al.*, 2016:1).

When looking at why there has not been a successful agricultural revolution in Africa, it is important to note the key components of the green revolution that took place in Asia. Asia's green revolution consisted of investment in research and development (R&D), investment in rural infrastructure, farmer support programmes (credit for farmers), and efficient and effective policy making as well as adequate investments. Governments in Asia played a

³ The literature on pro-poor growth has developed various instruments providing researchers with the possibility to evaluate from an ex-post perspective the extent to which the poor benefit from recent developments in a country (these instruments are regularly referred to as the "pro-poor growth toolbox"). (Klasen and Reimers, 2016:2).

⁴ The poor are identified by low incomes, low levels of education, poor healthcare, low land productivity, and low labour productivity (Klasen and Reimers, 2016:1).

crucial role and ensured a conducive environment for agriculture to succeed (Badiane and Makombe, 2014:4). Goyal and Nash's (2017) paper reiterates the need for governments to spend on agriculture in order to obtain substantial returns from the sector. Goyal *et al.*, (2017:36) state that the rationale for public investments in the agricultural sector derives from two fundamental sources; economic inefficiencies caused by market failures and inequalities in the distribution of goods and services.

An Africa-wide initiative regarding development was adopted by the African Union (AU) in 2002, under the New Partnership for Africa's Development (NEPAD). NEPAD put agriculture at the forefront of Africa's development agenda and, in 2003, African leaders endorsed the Comprehensive Africa Agriculture Development Programme (CAADP) as the main framework for guiding country actions in attaining the poverty and hunger MDGs and stimulating broad-based economic growth through agriculture-led growth (Badiane and Makombe, 2014:8). One of the key components of the CAADP, which is commonly known as the Maputo Declaration, is its call for bold action by governments to boost investments and create the conditions required for accelerated growth (Goyal *et al.*, 2016:36). It commits African governments to allocate at least 10% of public expenditure to the agricultural sector in order to achieve a 6% annual agricultural growth rate. However by 2010, seven years after the signing of the CAADP, the average agricultural spend by all African governments that were committed to CAAP was only 3.9% (Anisimova, 2016).

In contrast, by 2010 the share of agricultural spend in Malawi was 29% of the total budget. In South Africa's consolidated spending budget for the 2017/2018 financial year, spending on agriculture, rural development and land reform is a mere 1.7% of the total budget (R26.5 bn of R1.563 trn) (National Treasury, 2017). Agriculture's contribution to South Africa's GDP is thus in line with the amount spent, contributing just 2.3% towards GDP, much lower than the 6% stated by the CAADP (Stats SA, 2017).

The continent as a whole has not yet achieved a consistent 6% annual agricultural GDP growth rate. The fall in commodity prices-which started in mid-2014, carry-over effects of the Arab Spring-with North Africa being the most affected region in Africa, and the sluggish global recovery and slowdown in emerging markets are some of the reasons for the continent's sluggish economic growth (African Economic Outlook, 2017:26). The average annual agricultural GDP growth rate for Africa from 2003 to 2010 was 3.8%. A more recent study has projected Africa's economic growth to be 4.3% in 2018, increasing from 3.4% in 2017 and 2.2% in 2016 (African Economic Outlook, 2017:23). East Africa is still leading among the different regions on the continent, attaining 5.3% GDP growth in the year that the continent as a whole grew by 2.2% (African Economic Outlook, 2017:23)). Africa has also

not realised the 10% expenditure target, notwithstanding an average annual increase of 7.4% in the amount of agricultural expenditure from 2003 to 2010 (Badiane and Makombe, 2014:9).

Ravallion and Datt (1996) have written multiple papers focusing on economic growth and poverty reduction. Ravallion and Datt (1996) state that countries' growth policies need to consider the structure of the growth that is to be pursued. If poverty reduction is the objective, then certain structures, or sectors, must form the core of that growth (Mellor, 1999). Ravallion and Datt (1996) analysed data from India according to urban and rural income. They found that the rural to urban population shift has had an insignificant effect on poverty reduction. Urban growth also has had an insignificant effect on poverty reduction. Urban consumption growth increases inequality in urban areas, while rural growth improves the urban distribution of income. Ravallion and Datt (1996) also illustrate that the impact of rural growth on poverty reduction is nearly three times as great as urban growth. Their emphasis, namely that agriculture and the rural sector should not be neglected, does not imply that rural growth should be pursued in place of urban growth. If the agricultural sector is neglected, employment will increase little and poverty will increase substantially. That is presumably because increased rural incomes reduce the queue of the urban unemployed waiting for jobs. Rural growth of course has a major impact on reducing rural poverty. Rural growth reduces urban poverty even more than urban growth itself. Urban growth does not reduce rural poverty (Mellor, 1999; Ravallion and Datt, 1996).

Sixteen years later, Mellor (2015) was still on the same trajectory, namely that agriculture and rural development should not be pursued in place of urban growth, but rather concurrently, in order to have a sizeable impact on poverty alleviation. Mellor illustrates this by using Ethiopia, a developing country that achieved double-digit economic growth from 2004 to 2014, averaging 10.6% per annum in real terms during that period (Deloitte, 2014). Ethiopia's dependence on the agricultural sector has diminished from averaging around 56% of GDP in the 1980s to 41% in 2015 (World Bank, 2016a). The change in Ethiopia's economy emerged through growth in the services sector driven by financial intermediation, public administration, and retail trade.

Agriculture still makes a sizeable contribution to GDP in Ethiopia, but the 41% output is largely achieved through expansion of the land under cultivation as opposed to increasing productivity (increasing yields in the case of crop farming). Ethiopia has since signed a deal with Israeli Chemicals Limited (ICL) Africa, aimed at developing Ethiopia's potassium deposit, which is the third largest in the world. Farmers in Ethiopia are now able to access fertilisers that will boost their yields and make their crops more resistant to droughts

(Deloitte, 2014). The creation of a fertiliser industry in Ethiopia is a brilliant example of how the agricultural sector can foster the growth and development of other sectors – the manufacturing sector in this example – without being compromised as a sector.

Greyling (2012) found the following with regard to the role of the agricultural sector in the South African economy:

- Agricultural exports have played a balancing role in economic development due to the sector's positive trade balance during the period of analysis.
- The sector has been releasing labour to the rest of the economy since 1962, thus supporting the argument that the sector is a traditional and backward sector, supporting economic growth passively.
- The sector has made a net transfer of capital to the rest of the economy since the mid-2000s.

Greyling (2012) concludes by recommending that the existing agricultural marketing and international trade policy framework, which limits market distortions and promotes international trade, is retained. The potential that the sector has with regard to employment creation in rural areas, given the high labour intensity and the existence of some complementarities between labour and capital in the industry, is acknowledged. The competitiveness of the sector should be increased by means of investment in infrastructure.

1.3. Research Question

This study will seek to answer the following question; what challenges are the youth (black in particular) faced with and what needs to be done in order to attract the youth to the agricultural sector? The role that the agricultural sector has to play in inclusive economic growth will be looked at, highlighting the notion that a rural-urban shift is not a necessity for poverty alleviation, but rather that rural economies can thrive concurrently with urban economies.

1.4. The outline of the study

This study consists of six chapters. Chapter 1 covers the motivation for the study, the objective and research question and, lastly, the outline of the study. Chapter 1 maps out the journey that the paper will embark on, touching on unemployment, poverty, and the role of the agricultural sector in economic growth.

Chapter 2 focuses on a literature review of the theories that speak to the role that the agricultural sector has to play in alleviating poverty and the involvement of the youth in the

sector. Martin Ravallion and Gaurav Datt have been researching the link between economic growth and poverty alleviation for many years, and a discussion of their working papers, along with others, will form a major part of this chapter.

Chapter 3 looks at the empirical evidence found regarding unemployment and poverty in South Africa, while Chapter 4 looks the agricultural sector's role in addressing the problem of unemployment and poverty. Poverty in South Africa is widespread in the former homeland areas, and those areas are occupied almost exclusively by black people. The following quote resonates in this chapter: "There are four ways that agriculture contributes to poverty alleviation at a rural level: reducing food prices, employment creation, increasing real wages, and improving farm income. Results of studies conducted in several countries indicate that the pro poor role of agricultural growth can be dramatic and much more effective than other sectors at reducing poverty and hunger in both urban and rural areas" (Machethe, 2004). Comparisons with countries faced with similar problems will be made, highlighting the strategies that those particular countries have implemented in dealing with their unemployment woes.

Chapter 5 analyses the empirical data collected through a survey and also looks at the methodology. A questionnaire aimed at gauging the youth's interest and knowledge of the agricultural sector was compiled.

Chapter 6 contains the concluding remarks and looks at further research that can be conducted.

Chapter 2: The role of agriculture in inclusive economic growth

2.1. Introduction

The role that agriculture has to play regarding alleviating poverty and creating employment is the crux of this paper. The role that the sector has to play has been highly contested over the years, with some believing that it plays a crucial part in the inclusive economic growth of any economy, while others view the sector as a mere bystander with minimal relevance. This chapter will look at both of these contrasting views, concluding with a view of its own.

2.2. The different theories regarding the role of agriculture

At the dawn of the industrial revolution, no formal theory of the role of agriculture in economic development existed, because there was no development other than that of agriculture. It is estimated that, at the beginning of the 19th century, approximately 75% to 90% of the working population in the now-developed world was still engaged in farming (Johnson, 1997:2). In Johnson's paper (1997:3), a quote from Adam Smith states that:

"When by the improvement and cultivation of land and labour, one family can provide food for two, the labour of half the society becomes sufficient to provide food for the whole. The other half, therefore, or at least the greater part of them, can be employed in providing other things, or in satisfying the other wants and fancies of mankind".

It can be argued when looking at continents like Asia⁵ that the developed nations of today followed Adam Smith's notion, and that all these other industries we see today are as a result of "the other half of the population" participating in meeting the demands of the other wants and fancies of mankind. It is widely agreed that economic growth alone, is not sufficient for poverty reduction. A number of other factors influence whether the growth is more or less poverty reducing. The issue is whether the extra things needed enter additively or multiplicatively. Is it a matter of doing as many things as possible from a list of poverty-reducing actions, with extra impact as each one is ticked off? Or are there important interaction effects, such that only certain combinations do the trick? (Ravallion and Datt, 2002:383).

⁵ The Green Revolution brought modern science to bear on a widening Asian food crisis in the 1960s. The speed and scale with which it solved the food problem was remarkable and unprecedented, and it contributed to a substantial reduction in poverty and the launching of broader economic growth in many Asian countries. Improved cereal varieties, fertilisers, irrigation, and modern pest control methods lay at the heart of the Green Revolution, yet it was much more than a technology fix. It also required a supporting economic and policy environment (Hazell, 2009:1).

As stated before, economic growth alone is not sufficient to alleviate poverty. Although economic growth has lifted millions of people out of poverty, in many countries (including South Africa) growth has coexisted with rising inequality and the already marginalised being left behind (World Bank, 2018). The complex relationship that exists between economic growth, poverty, and inequality has been of major contestation with many conflicting views regarding which combination is best for the inclusive growth of a country.

“Economic growth is considered to be a powerful force for reducing income inequality and then reducing poverty. In recent years, many empirical studies have attempted to examine the relationship between income inequality and economic growth” (Jihene and Ghazi (2013: 668).

Jihene and Ghazi’s (2013) study examined empirical evidence regarding the causality between income inequality and economic growth for nine countries of the Middle-East and North African (MENA) region over the period 1960-2011. The data was examined using a bivariate VAR⁶ structure. The study concluded that income inequality does not seem to affect positively the long-run economic growth of a country. The results from this study support the notion that poverty and income inequality are integrated-development strategies must take into consideration the fact that fighting poverty to decrease income inequality should still be a priority (Jihene *et al.*, 2013).

Testament to this point is South Africa. South Africa adopted the Growth, Employment and Redistribution (GEAR) policy in 1996. GEAR promised to reduce poverty and inequality through accelerated economic growth. The driving factor behind GEAR was to be rapid expansion in private sector investment. The GEAR strategy was projected to create 400 000 new jobs per annum (Streak, 2004). Contrary to the desired outcome of the GEAR policy, the responsiveness of employment changes to economic growth in SA was consistently negative during the period of 1995-2000 with an average figure of -1.4⁷. South Africa experienced jobless growth which resulted in an increase in inequality, which is why poverty is still a major concern. Countries that are characterized by a high degree of income inequality and high rates of poverty are highly unlikely to reap the benefits of economic

⁶ Vector auto-regression (VAR) is a stochastic process model used to capture the linear interdependencies among multiple time series. VAR models generalize the univariate autoregressive model (AR model) by allowing for more than one evolving variable. All variables in a VAR enter the model in the same way: each variable has an equation explaining its evolution based on its own lagged values, the lagged values of the other model variables, and an error term (Jarocinski and Mackowiak, 2013).

⁷ The relation of unemployment with GDP can be assessed more accurately when the change in GDP is linked to the change in employment. This is an indication of the responsiveness of employment to changes in economic growth.

growth, even if they are not characterized as a low income country-with South Africa being an example as it is an upper-middle income country but South Africa is also one of the most unequal countries in the world (Lilenstein, Woolard, and Leibbrandt, 2016).

A study by Fosu (2016) looked at growth, inequality, and poverty reduction in developing countries during the period of the early mid-1990's and the 2000's. Eighty developing countries were selected to provide global country comparisons, the comparison of the data is done based on quantitative analysis methods. For the eighty developing nations, Fosu (2016:310) looked at the current poverty rates and economic growth vs. poverty reduction.

Key observations from the study (Fosu, 2016:328);

- For the majority of countries in the sample, income growth seemed to be a reasonable reflection of the observed poverty reduction rather than inequality changes.
- In some countries, both income levels and their distribution worsened which made poverty even worse, some of those countries are; Argentina, Georgia, South Africa, and Tanzania.
- Among the countries experiencing rising poverty rates, most of this record was, on average, due to income declines; 74 percent to income versus 26 percent to inequality for the \$1.25 (a day) standard.
- There is definitely a need however, to look beyond averages, and uncover country-specific-differences in what happens for to inequality during growth.
- These results suggest that each country should adopt a pro-poor growth strategy that will be in line with its inequality and income profile.

Pro-poor growth has been identified as one of the most promising pathways to achieving inclusive economic growth in developing countries. Klasen *et al.*, (2016) looked at pro-poor growth and Rwanda was the country used for empirical evidence (household surveys). Agricultural productivity was incorporated in the traditional toolbox and the results of the new toolbox illustrated the importance of agricultural productivity in poverty reduction, however the need to distinguish between the land and the labour productivity-poor is essential as they exhibit different characteristics. What is evident is that the success of agricultural productivity in Rwanda was highly dependent on the role that government played. The Rwandan Government had various programs that ensured the success of agricultural production such as crop intensification, over-post handling, mechanization and irrigation programs, and investments in improving rural infrastructure (Klasen *et al.*, 2016:29).

Cervantes-Godoy and Dewbre (2010:3) further reiterate the role of government (correct policy-making and implementation) in agricultural production playing a role in inclusive growth by listing six conditions that are necessary for agricultural productivity to result in poverty reduction; 1) access to output and input markets accommodated by a good transportation, marketing and processing infrastructure, 2) non-discriminatory tax and trade policy, 3) high rates of investment in agricultural research and extension, 4) a system of ownership rights that encourages initiative, 5) employment creating non-agricultural growth, and 6) well-functioning institutions and good governance.

Cervantes-Godoy and Dewbre's (2010) paper on the economic importance of agriculture for poverty reduction sought to answer the question, why are some countries doing better than others? Twenty-five developing countries⁸ that had posted extraordinary success in reducing extreme poverty over the previous twenty to twenty-five years were selected. These twenty-five countries were compared using indicators of their macroeconomic characteristics and their agricultural economic characteristics. The countries were of a diverse mix; the group included some of the poorest and some of the richest developing countries in the world, covering all the geographic regions of the world (Cervantes-Godoy and Dewbre, 2010). The findings were that, although economic growth generally was an important contributor to poverty reduction, the sector mix of growth mattered substantially. The major contributors to poverty reduction were divided into three groups: agriculture, non-agriculture, and remittances. The results are as follows;

Table 3: Major contributors to poverty reduction (Cervantes-Godoy and Dewbre, 2010).

Agriculture	Non-agriculture	Remittances
Brazil	China	Gambia
Cameroon	Mauritania	Ghana
Chile	Thailand	Guatemala
Costa Rica	Vietnam	Honduras
Dominican Republic		Indonesia

⁸ The 25 countries selected are Brazil, Cameroon, Chile, China, Costa Rica, Dominican Republic, Egypt, Gambia, Ghana, Guatemala, Honduras, Indonesia, Kenya, Malaysia, Mali, Mauritania, Mexico, Nicaragua, Panama, Philippines, Senegal, Tajikistan, Thailand, Tunisia and Vietnam.

Egypt		Kenya
Malaysia		Philippines
Mali		Senegal
Mexico		Mexico (same contribution as agriculture)
Nicaragua		Tajikistan
Panama		
Tunisia		

Table 3 indicates that 12 out of the 25 countries' growth in agricultural gross domestic product (GDP) per worker was more important, followed by growth in remittances per capita (9/25), with only four countries shown to have reduced poverty mainly because of growth in non-agricultural GDP per worker. In Mexico, the contribution for agriculture and remittances was the same.

Ravallion and Datt's (1996) work for India shows that reduction in poverty was a result of growth within sectors, not the transfer of labour from a low-earning sector (e.g. agricultural sector) to a high-earning sector (e.g. manufacturing sector). Agricultural growth and tertiary sector growth have a major effect on poverty reduction and manufacturing does not.

"The Ravallion and Datt data show that 84.5% of the substantial poverty reduction in India in the period of analysis was due to agricultural growth. They also show little effect of the many programs that directly targeted the poor" (Mellor, 1999:11).

If growth occurs leaving the agricultural sector out, two onerous burdens fall on the poor. First, the overall growth rate will be lower and, secondly, the part that reduces poverty will be missing. With robust action by government, rapid agricultural growth can be achieved more easily now than some decades ago (Mellor, 1999:12). The analysis of the Indian data illustrated that the impact of rural growth on poverty reduction was nearly three times as great as urban growth. Even after, the point is not that rural growth should be pursued in the place of urban growth, but rather that agriculture and the rural sector should not be neglected. If these are neglected, employment will increase little and poverty will increase

substantially. That is presumably because increased rural incomes reduce the queue of urban unemployed waiting for jobs (Mellor, 1999:19).

Sub-Saharan Africa (SSA) is home to over 200 million young people, who are employed primarily in agriculture, where they constitute 65% of the total employment. Young Africans are therefore key to African agriculture development. The issue that majority of the African youth are faced with is that they are unable to fulfil their potential because of poverty, hunger, poor health and lack of education (Mathivha, 2012:8).

It is important to differentiate between two facets of agriculture: the formal-commercial and the primary-subsistence type. Farming, as a primary subsistence activity, takes much longer to bear financial dividends, if at all. In general, the lack of adequate education means that, although many young people cannot gain formal employment, migration to the cities to participate in informal small-scale enterprise (such as selling imported clothes, cheap electronics, etc.) remains preferable to farming (Mathivha, 2012:8). It is thus evident that the 65% of the youth who are participating in farming in the SSA region are involved in primary-subsistence farming, which yields minimal financial dividends, and they remain poverty stricken, among other things. They are unable to engage in the formal-commercial type of farming because that is where farming is capital intensive and takes an element of financial and technical expertise. Tavaka Nyoni's (2012) paper on current and emerging youth policies, with Zimbabwe as the case study, had some interesting findings. To highlight a few:

- Youth in Zimbabwe have a very limited impact on policy formulation for agriculture in the country. This has been due to the very strict top-down approach utilised by government, their own lack of institutional organisation and the differentiated nature of agricultural production in the country.
- Agricultural and youth policies in the country are mainly broad in scope and are not specific. This, in turn, leads to the duplication of mandates and a lack of clarity about which institutions of government departments are in charge of policy implementation.
- Status and prestige play a pivotal role in the way young people form their aspirations and perceive agriculture. Agriculture in general needs to be "re-branded" to young people to change the perception that it is a 'last resort' activity for the formally unemployed.
- Government needs to find creative ways to remove impediments to access to finance and inputs, perhaps through public-private partnerships (PPPs).

Mathivha's (2012) paper, which used SA as its case study, included a SWOT (strengths, weaknesses, opportunities and threats) analysis of youth development in agriculture. This is illustrated in Table 4 below;

Table 4: Challenges and opportunities for youth development in agriculture (Mathiva, 2012).

<p>Strengths</p> <p>Demographics (age and gender)</p> <p>The latent energy, capacity and ability to produce</p> <p>Ability to learn, produce new ideas and bring required innovation</p> <p>Youth are the main market for food consumption and knowledge of their own eating peculiarities</p> <p>Significant impact on public opinion, policy and action</p> <p>Untapped potential, much like the agricultural sector</p> <p>Traditional knowledge system</p>	<p>Weaknesses</p> <p>Lack of information and research</p> <p>Lack of capital (production equipment is an example)</p> <p>Lack of reproductive infrastructure such as roads, electricity, water and marketing facilities</p> <p>Lack of required skills/training and mentorship</p> <p>Lack of marketing experience</p> <p>Labour intensiveness discourages youth (they prefer "desk" work, computers, etc.)</p> <p>The youth are not properly organised and mobilised</p> <p>Lack of culture of entrepreneurship (attitudes and behaviour)</p> <p>Informal players, lack of accreditation, qualifications, certifications</p>
<p>Opportunities</p> <p>Global population growth creates more commodity demands</p> <p>Exciting careers in agriculture</p> <p>Transformation advantage (AgriBEE charter, major BEE deals, skills development, industrialisation)</p>	<p>Threats</p> <p>Lack of co-ordinated efforts to involve youth in policy formulation and planning</p> <p>Lack of incentives</p> <p>Limited budget and support from government</p> <p>Deviant behaviour as a result of lack of opportunities (crime, drugs, violence)</p>

<p>Various institutions and initiatives that have been created, e.g. BRICS</p> <p>International donor community focusing more on agriculture, e.g. G8 la Quilla and 2012 Camp David declarations</p> <p>A niche market exists to link rural agriculture to mainstream agribusiness value chains</p> <p>Product development (innovation)</p> <p>Ongoing national and regional infrastructural programmes will reduce the cost of doing business while opening new opportunities</p> <p>Regional economic integration, e.g. major maize supplier to countries like Lesotho</p>	<p>Lack of consistent and structured support system for small-scale farmers</p> <p>Trade barriers</p> <p>The negative image of agricultural pursuits</p> <p>Lack of education, mentorship and motivation</p>
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With an expected world population of nine billion by the year 2050 and declining interest of the youth worldwide to remain in rural areas and take up agriculture, the Young Professionals' Platform for Agricultural Research for Development (YPARD) asks the question, "who will feed this growing population?" The number of young people of working age is increasing, while this same group continues to shy away from careers in agriculture. "Agriculture has an image problem. There is a decreasing interest among youth in entering agricultural related fields due to the persistent perception of agriculture as an outdated with minimal financial returns" (YPARD, 2010). The average age of a farmer in Brazil is 52 years, while it is 57 in the United States of America (USA), and 60 in Africa (YPARD, 2010).

Thinking about youth, farming and food raises fundamental questions about the future, both of rural young women and men, and of agriculture itself. The current debate about "land grabbing" is in fact a debate about the future shape of farming and the fate of rural populations. "If visions of a future based on smallholder-based agriculture are to be realised, and if young people are going to have a place in that future, these problems have to be taken seriously and given much more attention than has been the case in recent policy debate, and in recent research" (White, 2012:16). The issue of intergenerational transfer of land rights, or, when that does not happen, intergenerational dispossession, when one

generation's land is sold off that ought to have been passed on to the next, deserves attention. If an economy has an interest in smallholder agriculture as well as industrial capitalist agriculture, there needs to be a generation of rural men and women interested in taking up the challenge.

Bhorat and Van der Westhuizen (2012) identify key trends worthy of observing when it comes to looking at changes and challenges in South Africa's second decade of democracy:

- 1) It is clear that both absolute and relative levels of poverty have fallen for African and female-headed households. It is a result invariant to the choice of poverty line.
- 2) Race and gender remain overwhelming determinants of this poverty profile.
- 3) The trends in income inequality suggest that South Africa has become one of the most unequal nations in the world.
- 4) It is evident that income inequality between racial group – to all intents and purposes between Africans and whites – is driving this overall increase.

Bhorat and Van der Westhuizen (2012) agree that persistent and high levels of poverty, and particularly inequality, can harm the quality of democracy and potentially lead to social conflict. There is also consensus that economic growth alone is not enough to guarantee the sustainability of a democracy, and that the equitable distribution of income, assets, education and other opportunities is important for both the quality and endurance of democracy.

Tseng's (2013) paper, titled "State transfers, poverty and inequality of income in South Africa: a fifteen year review", analysed the progress that was made in South Africa from 1995 to 2010. Tseng (2013) utilised the two official national poverty thresholds of poverty, of R577 and R416 per person per month at March 2009 prices, as the upper and lower bounds of subsistence levels of livelihoods. The paper finds that at least half of Africans are classified as poor at the upper poverty line of R577 per person per month, and 45% at the R416 line. On the other hand, just more than a quarter of coloureds are considered poor, and among Asian- and white-headed households not even a tenth are living in classified deprivation. "Similar contrasting deductions can be illustrated in all other categories of poverty measures and poverty lines, suggestive of the fact that SA's first decade and a half of democracy has continued to grovel in poverty-stricken majority, especially the African group" (Tseng, 2013:11).

“The link between economic growth and poverty reduction is theoretically clear and simple: higher growth in economy promotes individual’s income growth; therefore, poverty level falls in the society. However, the reason for the insufficient condition and what makes assessments around growth and poverty so complex is the distribution of growth-benefit, or, the initial and dynamics of inequality. Essentially, the impact of economic growth on poverty differs depending on how much inequality distributes the growth-dividend” (Tseng, 2013:20).

Income inequality is not unique to South Africa; most OECD countries also experience income inequality. Brazil, a BRICS member country, as mentioned before, has managed to succeed with regard to reducing inequality over the years.

“Unlike most countries, Brazil has managed over the past ten years to reduce income inequality. It is estimated that the Gini coefficient was reduced from above 0.60 in the early 1990s to the mid 0.50 by the late 2000s. In the 2000s, the income of the poorest 20% increased at about 6.3% per year while that of the richest 20% increased by only 1.7%” (Netshitenzhe, 2013:7).

The Gini coefficient is a ratio between zero and one. The higher, or closer to one, a country’s Gini coefficient is, the greater the level of inequality in that country (Stats SA, 2014b). SA’s Gini coefficient remains “unacceptably high”. Despite the steep reduction in inequality, SA remains the most unequal among its peer countries because it started out with such extreme levels of inequality. Before the effects of fiscal policies are taken into account, SA’s Gini coefficient is 0.771, against Brazil’s 0.597 and Mexico’s 0.511 (OECD, 2016). After the effects of fiscal policies are taken into account, South Africa’s Gini coefficient is 0.596, Brazil’s Gini coefficient is 0.439, and Mexico’s is 0.429.

In Brazil, a combination of factors including the expansion of job opportunities and the introduction of a minimum wage, expansion of access to social grants, regional economic interventions as well as increased consumption demand played a central role (Netshitenzhe, 2013:7). “The National Development Plan will only ever be as good as its implementation. Right now, it’s missing a spark, some kind of magic to bring it to fruition. Throughout history, most fundamental changes have been initiated by the youth” (Karaan, 2015:6). As stated before, the youth in South Africa, and indeed across the world, do not seem to be interested in agriculture. In South Africa there are an average of 15 571 vacant job opportunities in professional fields in agriculture each year. In spite of this, fewer than 3 000 students graduate each year to fill these positions (Kriel, 2015).

2.3. Conclusion

The role of agriculture in economic development is crucial and cannot be neglected if inclusive growth is to be achieved. To reiterate this point, Marsh (2015) found that, when labour productivity in agriculture increases relative to labour productivity in non-agricultural sectors, inequality is reduced. Agriculture should not take precedence over other sectors, but rather grow concurrently with them, rather than being neglected. Agriculture has a pivotal role to play in the struggling South African economy. The role of government has also been reiterated in this chapter and it is evident that government support is crucial for the role of agriculture in poverty alleviation and employment creation. The next chapter will look at poverty, unemployment and inequality in South Africa-the contributing factors and empirical evidence.

Chapter 3: The state of unemployment, poverty and inequality in South Africa

3.1. Introduction

South Africa is faced with an enormous problem of unemployment, poverty, and inequality. Reducing poverty and inequality and creating employment have been the cornerstone of development policy in South Africa since 1994, with policies such as the Reconstruction and Development Plan (RDP) and the Growth Employment and Redistribution (GEAR) policy, both of which were aimed at ensuring that poverty and inequality is alleviated and that employment is created for all of the people of South Africa.

South Africa has made significant strides towards enhancing the wellbeing of its citizens, with 87.6% of the population having access to electricity in 2016, compared to 58% in 1990 (Stats SA, 2016). The report by Stats SA (2016) also revealed that 89.8% of South African households are using piped water, compared to 76.6% in 1996.

The legacy of apartheid however does still live on, there are significant differences in poverty levels between the population groups in South Africa. In terms of poverty share, more than nine out of 10 (94.2%) poor people in South Africa were black Africans in 2011, a proportion that had increased slightly from 2006 (92.9%) and 2009 (93.2%) (Stats SA, 2014).

With acknowledgement of these noteworthy strides and the difficulties that South Africa is still facing, this chapter will look at the current situation regarding unemployment, poverty, and inequality in South Africa and the contributing factors.

3.2. The state of unemployment in South Africa

The labour force includes both employed and unemployed persons. Not economically active persons are those who did not work in the reference week because they either did not look for work or start a business in the four weeks preceding the survey, or they were not available to start work or a business in the reference week. The not economically active are composed of two groups: discouraged work-seekers and other. The unemployment rate measures the proportion of the labour force that is trying to find work. The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work; it provides an indication of the relative size of the supply of labour available to engage in the production of goods and services. Low labour force participation rates among the youth, ranging from 52.7% in 2008 to a low of 47.4% in 2011, reflect the situation where some young people prefer to remain in education in the hope of improving their prospects of gaining employment

at a future date. Low participation rates also reflect increasing discouragement among young people who leave the labour force altogether (Stats SA, 2014a).

The South African work-age population increased by 0.4% in the third quarter of 2018 compared to the second quarter of 2018. The number of employed persons increased by 92 000 to 16.4 million and the number of unemployed persons rose by 127 000 to 6.2 million in the third quarter of 2018 (Stats SA, 2018). The unemployment rate increased by 0.3% to 27.5%.

Table 5 displays the unemployment situation in South Africa since 2016 (Stats SA, 2018);

Table 5: Labour force characteristics by age, 2016-2018 (Stats SA, 2018).

	Jan- Mar 2016	Apr- Jun 2016	Jul- Sep 2016	Oct- Dec 2016	Jan- Mar 2017	Apr- Jun 2017	Jul- Sep 2017	Oct- Dec 2017	Jan- Mar 2018	Apr- Jun 2018	Jul- Sep 2018
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
15-64 years											
Population 15-64 yrs	36 431	36 591	36 750	36 905	37 061	37 217	37 373	37 525	37 678	37 832	37 985
Labour Force	21 398	21 179	21 706	21 849	22 426	22 277	22 402	22 051	22 358	22 370	22 589
Employed	15 675	15 545	15 833	16 069	16 212	16 100	16 192	16 171	16 378	16 288	16 380
Unemployed	5 723	5 634	5 873	5 781	6 214	6 177	6 210	5 880	5 980	6 083	6 209
Not economically active	15 033	15 412	15 044	15 055	14 634	14 941	14 971	15 474	15 320	15 462	15 395
Rates (%)											
Unemployment rate	26.7	26.6	27.1	26.5	27.7	27.7	27.7	26.7	26.7	27.2	27.5
Employed / population ratio (Absorption)	43.0	42.5	43.1	43.5	43.7	43.3	43.3	43.1	43.5	43.1	43.1
Labour force participation rate	58.7	57.9	59.1	59.2	60.5	59.9	59.9	58.8	59.3	59.1	59.5
15-24 years											

Population 15-24 yrs.	10 305	10 309	10 312	10 313	10 314	10 315	10 315	10 314	10 312	10 311	10 308
Labour Force	2 761	2 657	2 763	2 715	2 874	2 778	2 766	2 670	2 638	2 590	2 664
Employed	1 256	1 229	1 265	1 333	1 315	1 226	1 322	1 305	1 257	1 200	1 257
Unemployed	1 506	1 428	1 497	1 382	1 559	1 552	1 444	1 365	1 381	1 390	1 408
Not economically active	7 543	7 653	7 549	7 598	7 440	7 537	7 550	7 644	7 674	7 721	7 644
Rates (%)											
Unemployment rate	54.5	53.7	54.2	50.9	54.3	55.9	52.2	51.1	52.4	53.7	52.8
Employed / population ratio (Absorption)	12.2	11.9	12.3	12.9	12.7	11.9	12.8	12.7	12.2	11.6	12.2
Labour force participation rate	26.8	25.8	26.8	26.3	27.9	26.9	26.8	25.9	25.6	25.1	25.8
25-34 years											
Population 25-34 yrs	9 586	9 627	9 666	9 704	9 742	9 780	9 817	9 854	9 890	9 927	9 963
Labour Force	7 182	7 033	7 215	7 273	7 362	7 307	7 325	7 187	7 303	7 334	7 404
Employed	4 939	4 824	4 896	4 954	4 966	4 907	4 871	4 790	4 890	4 869	4 890
Unemployed	2 242	2 208	2 319	2 319	2 395	2 399	2 454	2 397	2 413	2 466	2 514
Not economically active	2 405	2 594	2 451	2 431	2 380	2 473	2 493	2 667	2 587	2 593	2 559
Rates (%)											
Unemployment rate	31.2	31.4	32.1	31.9	32.5	32.8	33.5	33.4	33.0	33.6	34.0

Employed / population ratio (Absorption)	51.5	50.1	50.7	51.1	51.0	50.2	49.6	48.6	49.4	49.0	49.1
Labour force participation rate	74.9	73.1	74.6	74.9	75.6	74.7	74.6	72.9	73.8	73.9	74.3
35-44 years											
Population 35-44 yrs.	7 732	7 778	7 821	7 861	7 902	7 943	7 983	8 021	8 060	8 098	8 137
Labour Force	6 106	6 123	6 271	6 352	6 428	6 490	6 506	6 423	6 518	6 537	6 535
Employed	4 868	4 815	4 923	4 992	5 016	5 040	5 027	5 081	5 154	5 147	5 100
Unemployed	1 238	1 308	1 348	1 360	1 412	1 450	1 478	1 343	1 363	1 390	1 435
Not economically active	1 627	1 654	1 550	1 510	1 474	1 453	1 477	1 598	1 542	1 562	1 602
Rates (%)											
Unemployment rate	20.3	21.4	21.5	21.4	22.0	22.3	22.7	20.9	20.9	21.3	22.0
Employed / population ratio (Absorption)	63.0	61.9	62.9	63.5	63.5	63.5	63.0	63.3	64.0	63.6	62.7
Labour force participation rate	79.0	78.7	80.2	80.8	81.3	81.7	81.5	80.1	80.9	80.7	80.3
45-54 years											
Population 15-64 yrs.	5 247	5 287	5 330	5 375	5 421	5 467	5 515	5 564	5 614	5 664	5 716
Labour Force	3 811	3 820	3 891	3 902	4 063	4 043	4 090	4 080	4 156	4 181	4 252
Employed	3 220	3 279	3 323	3 313	3 393	3 420	3 426	3 445	3 488	3 511	3 570
Unemployed	591	541	568	589	670	623	663	636	668	669	683
Not economically active	1 436	1 467	1 439	1 473	1 358	1 424	1 425	1 484	1 458	1 483	1 463

Rates (%)											
Unemployment rate	15.5	14.2	14.6	15.1	16.5	15.4	16.2	15.6	16.1	16.0	16.1
Employed / population ratio (Absorption)	61.4	62.0	62.3	61.6	62.6	62.6	62.1	61.9	62.1	62.0	62.5
Labour force participation rate	72.6	72.3	73.0	72.6	74.9	74.0	74.2	73.3	74.0	73.8	74.4
55-64 years											
Population 55-64 yrs.	3 561	3 590	3 621	3 651	3 682	3 712	3 743	3 772	3 802	3 832	3 861
Labour Force	1 538	1 546	1 567	1 607	1 701	1 659	1 717	1 691	1 742	1 729	1 734
Employed	1 391	1 398	1 426	1 477	1 522	1 506	1 545	1 551	1 588	1 561	1 564
Unemployed	147	148	141	130	178	153	171	140	154	168	170
Not economically active	2 023	2 044	2 054	2 044	1 981	2 053	2 026	2 081	2 059	2 102	2 127
Rates (%)											
Unemployment rate	9.5	9.6	9.0	8.1	10.5	9.2	10.0	8.3	8.9	9.7	9.8
Employed / population ratio (Absorption)	39.1	38.9	39.4	40.5	41.3	40.6	41.3	41.1	41.8	40.7	40.5
Labour force participation rate	43.2	43.1	43.3	44.0	46.2	44.7	45.9	44.8	45.8	45.1	44.9

Unemployment clearly is more prevalent amongst the youth than among adults. The labour force participation rate is also lower amongst the youth compared to adults. The South African economy struggles to absorb the youth into the ranks of the employed.

To dive further into the dire situation of the youth in South Africa, Stats SA's third quarter labour force survey (2018) looks at the youth in two segments during the period January 2016 up to September 2018, as illustrated in Table 6.

	Jan- Mar 2016	Apr- Jun 2016	Jul- Sep 2016	Oct- Dec 2016	Jan- Mar 2017	Apr- Jun 2017	Jul- Sep 2017	Oct- Dec 2017	Jan- Mar 2018	Apr- Jun 2018	Jul- Sep 2018
	000	000	000	000	000	000	000	000	000	000	000
15-24 years											
Population 15-24 yrs.	10 305	10 309	10 312	10 313	10 314	10 315	10 315	10 314	10 312	10 311	10 308
Labour Force	2 761	2 657	2 763	2 715	2 874	2 778	2 766	2 670	2 638	2 590	2 664
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Not economically active	7 543	7 653	7 549	7 598	7 440	7 537	7 550	7 644	7 674	7 721	7 644
Rates (%)											
Unemployment rate	54.5	53.7	54.2	50.9	54.3	55.9	52.2	51.1	52.4	53.7	52.8
Employed / population ratio (Absorption)	12.2	11.9	12.3	12.9	12.7	11.9	12.8	12.7	12.2	11.6	12.2
Labour force participation rate	26.8	25.8	26.8	26.3	27.9	26.9	26.8	25.9	25.6	25.1	25.8
25-34 years											
Population 25-34 yrs	9 586	9 627	9 666	9 704	9 742	9 780	9 817	9 854	9 890	9 927	9 963
Labour Force	7 182	7 033	7 215	7 273	7 362	7 307	7 325	7 187	7 303	7 334	7 404
Employed	4 939	4 824	4 896	4 954	4 966	4 907	4 871	4 790	4 890	4 869	4 890
Unemployed	2 242	2 208	2 319	2 319	2 395	2 399	2 454	2 397	2 413	2 466	2 514
Not economically active	2 405	2 594	2 451	2 431	2 380	2 473	2 493	2 667	2 587	2 593	2 559
Rates (%)											
Unemployment rate	31.2	31.4	32.1	31.9	32.5	32.8	33.5	33.4	33.0	33.6	34.0

Employed / population ratio (Absorption)	51.5	50.1	50.7	51.1	51.0	50.2	49.6	48.6	49.4	49.0	49.1
Labour force participation rate	74.9	73.1	74.6	74.9	75.6	74.7	74.6	72.9	73.8	73.9	74.3

Table 6: Youth unemployment (Stats SA, 2018).

It is evident that unemployment prevails more between the ages of 15 and 24, after which the figure drops when looking at ages 25 to 34 years. An obvious reason for this is that most of the youth are still engaging in some form of full-time education when they are between 15 and 24 years of age. Compared to the third quarter of 2017, the percentage of youth aged 15–34 years who were not in employment, education or training (NEET) increased by 0.7% from 38.3% to 39% in Q3: 2018. The NEET rate increased for both male and female youth in Q3: 2018. More than four in every ten young females were not in employment, education, or training (Stats SA, 2018).

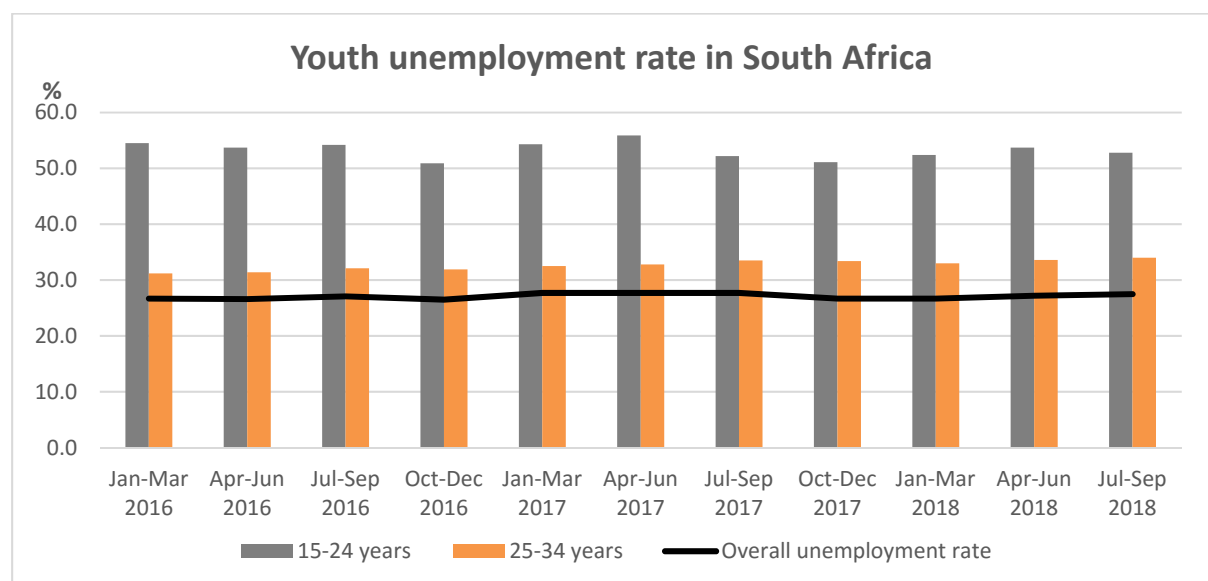


Figure 1: Youth unemployment rate for South Africa (Stats SA, 2018).

South Africa's total labour force as of the third quarter of 2018 was 22 589 000 people. Of these, 6 209 000 were unemployed. The black population constitutes 78% of the total labour force and, in contrast, the white population constitutes 9.5%. Acknowledging the fact that the white population is much smaller than the black population, the difference in unemployment rates is still not acceptable. Figure 2 illustrates the differences in unemployment by

population group. The unemployment rate of the black population is consistently above South Africa unemployment throughout this period. The unemployment rate of the black population reached 31.1% by the third quarter of 2018.⁹

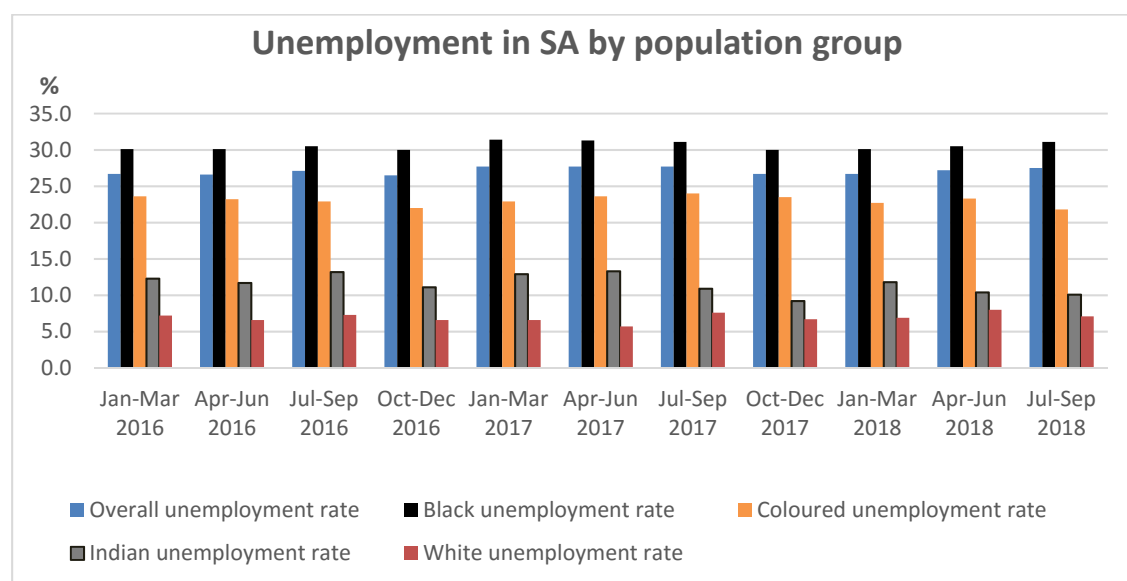


Figure 2: population group and South Africa unemployment rates (Stats SA, 2018).

There are a number of reasons why black people are so marginalised compared to white people. According to the Southern African Regional Poverty Network (SARPN) (2013) there are five broad categories of economic flows reflecting different economic positions in an economy. These are (1) income derived from owning property, (2) income received in terms of salaries and wages, (3) economic resources mobilised through subsistence and household activities, (4) transfer payments received from private or government sources and (5) self-employment. Each of these categories is intimately connected to a set of economic relationships that define and structure a modern capitalist economy. Exclusion from, or marginalisation within, these sources of economic resource flows greatly increases the risk of poverty.

Regarding the five categories identified by the SARPN, the legacy of apartheid has resulted in skewed distribution among all five categories. Apartheid was central to this skewed distribution, driving the social exclusion of the majority and the social inclusion of the minority. In particular, the apartheid regime constructed citizenship and subject rights to determine which groups would have access to what level of social protection, depending on their functionality to the racially constructed economic and social system. Apartheid gave black South Africans an inferior education, excluded them from ownership of most of the

⁹ The working age population (15 to 64 years) has been used for all population groups.

land and the prime residential property, and prevented them from entering many of the more lucrative occupations by prohibiting or severely restricting their access to many economic activities (SARPN, 2013).

The next section will look at the situation of inequality and poverty in South Africa and the contributors.

3.3. The state of poverty and inequality in South Africa

3.3.1. Poverty in South Africa

Close to 60% of government spending in South Africa is allocated to the social wage. Social wages are provided through free primary healthcare, no-fee paying schools although the quality of much of the education is questionable, and social grants, to name a few. Although initially seen as a short-term measure to address poverty, social grants have increasingly become a source of livelihood in South Africa and have played an instrumental role in reducing poverty levels (Stats SA, 2014b).

In analysing the pros and cons of social grants with regard to our economic prosperity, Bhorat and Van der Westhuizen (2012:20) drew the following conclusion in their working paper on poverty, inequality and the nature of economic growth in South Africa:

“Our analysis of the nature of economic growth since 1995 suggests that, despite positive economic growth, individuals at the top end of the distribution have gained the most from the post-apartheid growth dividend. Indeed, what this suggests is that the country’s current democratic growth model is crafted around supporting incomes (social grants) at the bottom end of the distribution through an extensive social transfer programme, whilst offering few returns to those in the middle of the distribution”.

Inclusive growth is in essence economic growth that is inclusive of the marginalised in a particular economy. An example of what inclusive growth aims to alleviate is jobless growth when economies are growing. The inclusiveness index is a weighted average of poverty rates, income inequality and labour participation. The index ranges between 0 and 1, where 0 represents a high degree of inclusiveness and 1 a low degree of inclusiveness (World Bank, 2008).

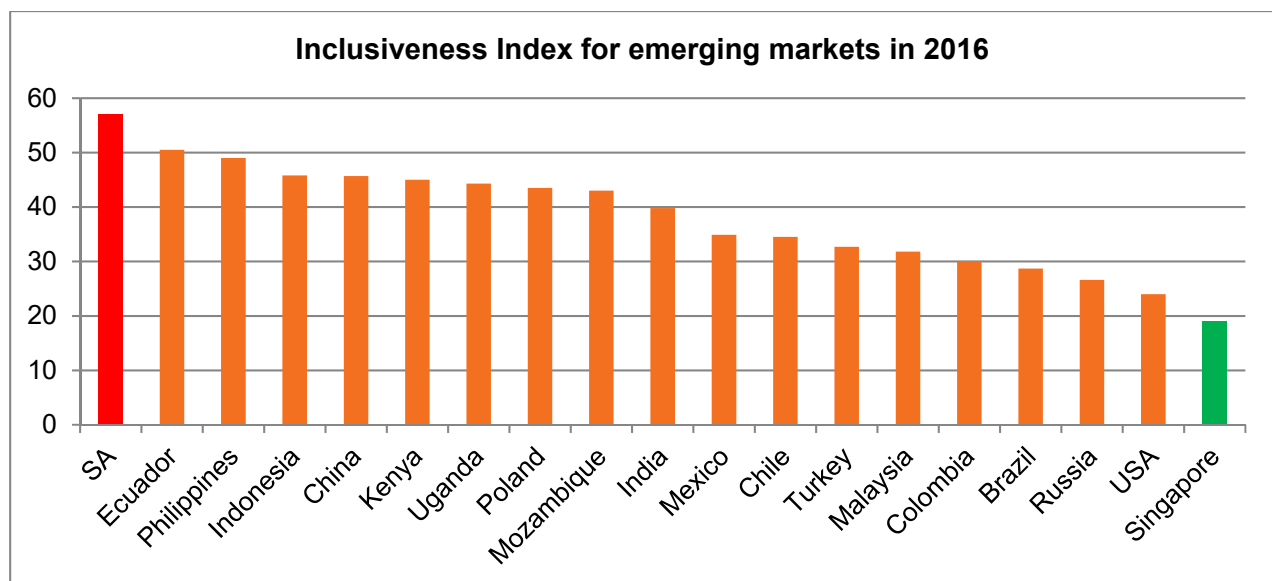


Figure 3: Inclusiveness index for emerging markets (United Nations, 2016).

The figure above indicates that South Africa performs poorly amongst other emerging economies regarding inclusivity. As noted before, inequality and poverty are key components of inclusive growth, or the lack thereof when the former are high. The United States and Singapore are not emerging economies, but were added to illustrate the difference between developed economies and emerging economies.

In 2011, only 3.4% of the Indian/Asian population was found to be poor in South Africa. The poverty headcount for whites, among whom less than 1% were found to be poor in 2011, remained fairly similar from 2006 to 2011. Figure 4 shows the significant differences in levels of poverty amongst the different population groups.

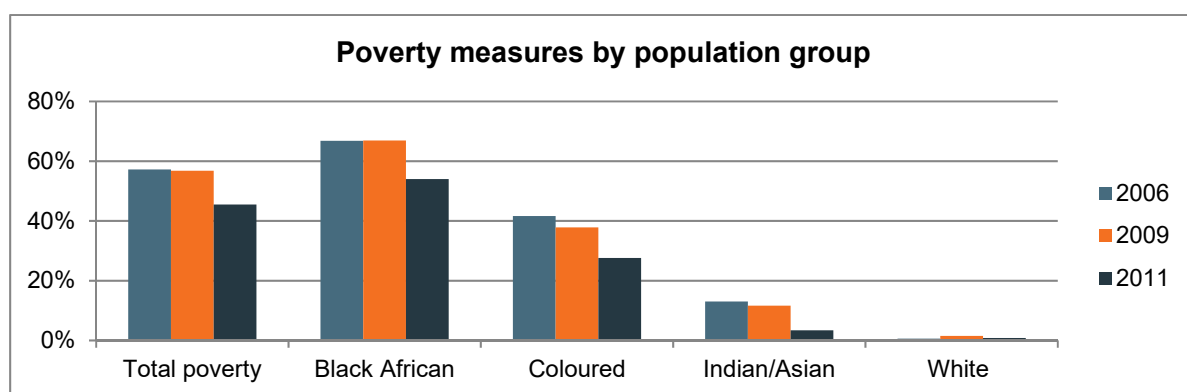


Figure 4: Poverty headcount by population groups (Stats SA, 2014b).

Although poverty has been declining at a national level and for all population groups, the black population is above the national average. More than half of South Africa's black population is living in poverty.

In 2006, only 6% of individuals with an education level higher than matric were living in poverty. While this proportion increased to 10.6% in 2009, it had decreased again to 5.5% in 2011. Figure 5 illustrates the relationship between poverty and education. The relationship between education and poverty appears strong – as the poverty measures reflect, the lower the level of education attained, the more likely adults are to be poor and experience more intense levels of poverty;

In stark contrast, those individuals with little or no education displayed significantly higher levels of poverty. More than three-quarters (78.5%) of adults with no formal schooling were poor in 2006, as were seven out of every ten (70.5%) adults with some primary school education. While these high levels of poverty increased in 2009, there were significant decreases by 2011 – this trend was seen within each different category of educational attainment. Nevertheless, despite a 16% decrease in poverty headcount for adults with no formal schooling from 2006 to 2011, almost two-thirds (66.0%) remained impoverished in 2011 (Stats SA, 2014).

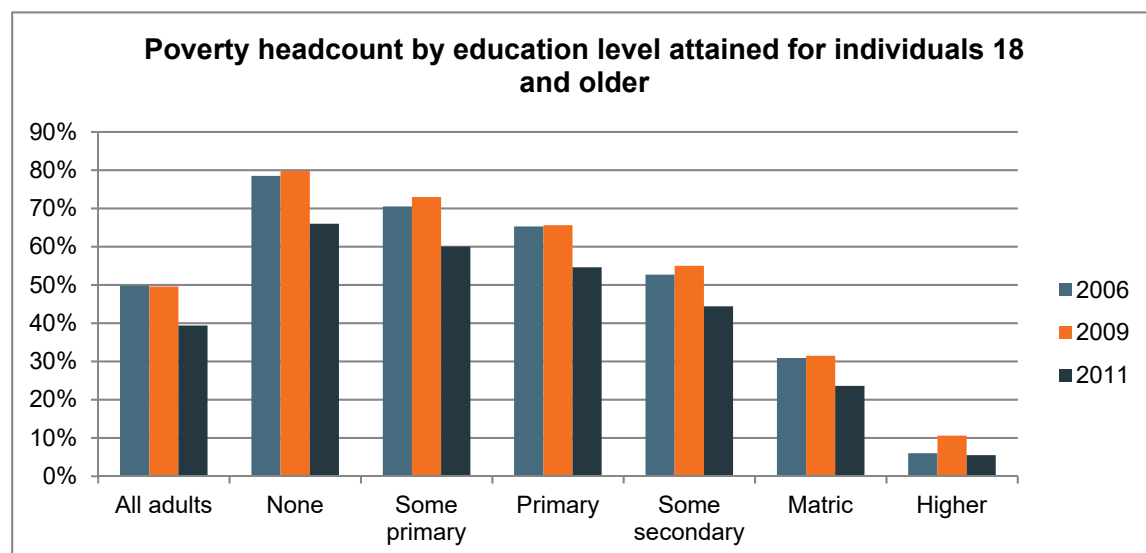


Figure 5: Poverty headcount by education level attained for individuals 18 years and older (Stats SA, 2014b).

The legacy of apartheid lives on¹⁰, but current public policy and resource mobilisation at a national, provincial and local government level has been failing to recognise the

¹⁰ The following are examples of laws under apartheid measures that excluded black people (Department of Justice and Constitutional Development, 2018):

- The Land Act of 1913, which confined the land area that Africans could legally own or rent to 13% of South Africa
- The 1913 Mines Act, which contained the first of many job reservations policies
- The Urban Areas Act of 1945
- The Coloured Preference Policy

considerable potential of the rural economy in South Africa. Public policies and investments in developing nations have historically favoured the industrial, urban and service sectors at the expense of agricultural and other rural sector development.

“It is not an exaggeration to say that the battle to achieve the global society’s stated objectives on hunger and poverty reduction will be won or lost in the rural areas of the developing countries. Globally, extreme poverty continues to be a rural phenomenon despite increasing urbanisation. The promotion of the rural economy in a sustainable manner has the potential of increasing employment opportunities in rural areas, reducing regional income disparities, stemming pre-mature rural-urban migration, and ultimately reducing poverty at its very source (Anríquez and Stamoulis, 2007:1).

In addition, the development of rural areas may contribute to the preservation of the rural landscape and the protection of indigenous cultures and traditions, while rural societies could serve as a social buffer for the urban poor in periods of economic crisis or social urban unrest (Anríquez and Stamoulis, 2007:1).

When talking about poverty, especially in the South African context, it is not possible to do so without mentioning the following – inequality, rural development, urbanisation and infrastructure.

3.3.2. The rural-urban migration shift

The definition of rural development has been changing consistently over time because of changes in the perceived goals of development. “A reasonable definition of rural development would be: development that benefits rural populations; where development is understood as the sustained improvement of the population’s standards of living or welfare” (Anríquez and Stamoulis, 2007:2). In the 1960s and 1970s, industrialisation was seen as the catalyst for economic development.

“In this context it seemed natural to define rural development as precisely leading into the industrialization path: rural development is essentially a part of structural transformation characterised by diversification of the economy away from agriculture. This process is facilitated by initial rapid agricultural growth that ultimately leads to a significant decline in the share of agriculture to total employment and output and in proportion of rural population to total population (Anríquez and Stamoulis, 2007:2).

-
- The Group Areas Act of 1956, which restricted African access to and African economic activity in the urban areas

Reiterating Anríquez and Stamoulis's (2007) view on rural development, the International Fund for Agricultural Development (IFAD) (2016) states that rural development does not happen in isolation, but as part of a broader process of structural transformation shaped by the interlinkages between agriculture, the rural non-farm economy, manufacturing and services. Rural development is essential for structural transformation. The current rural-urban migration shift that is occurring in most developing nations is not catalysed by industrialisation, as was the case in the 1960s and 1970s in certain economies, but rather by adverse poverty conditions in the rural areas. Rural dwellers move to urban areas seeking to better the quality of their lives.

Urban areas offer great potential to secure children's rights and accelerate progress towards the Sustainable Development Goals (SDGs). Cities attract and generate wealth, jobs and investment, and are therefore associated with economic development. The more urban a country, the more likely it is to have higher incomes and stronger institutions. Children in urban areas are often better off than their rural counterparts, due to higher standards of health, protection, education and sanitation. "It is generally accepted that urbanisation involves the shift in population from rural to urban settlements. From a demographic perspective, the urbanisation level is best measured by the urban population share; with the urbanisation rate being the rate at which that share is growing" (McGranahan and Satterthwaite, 2014:4).

The link between urbanisation and economic development in Africa, however, contrasts with to the norm, with the urbanisation-economic development link in Africa being the weakest in the world, signalling that urbanisation in Africa does not necessarily mean that economic development is taking place. South Africa is no exception to this notion (Schunemann and Aucoin, 2016).

The main reason for rural-urban migration in South Africa is the same as in most parts of the world, namely differences in economic opportunity.

"Africa's future is urban. Quality of life for Africa's city dwellers will, however, directly depend on the quality of urban governance. Urbanisation can spur development but under current conditions, it is more likely to compound Africa's structural challenges. Making cities inclusive, safe, resilient and sustainable as stipulated in the UN's Sustainable Development Goals (SDG's) is no easy task (Schunemann and Aucoin, 2016).

Africa's urban population is the fastest growing in the world and it is estimated that, by 2030, six of the world's 41 megacities¹¹ will be in Africa. "The existing trio of Cairo, Lagos and Kinshasa will be joined by Johannesburg, Luanda and Dar es Salaam. Africa's megacities absorb a significant share of national populations. They are key drivers of their countries' economic performance and connect Africa to the global economy" (Schunemann and Aucoin, 2016).

The problem that South Africa and many other developing nations face is the quality and standard of urbanisation, which in actual fact does not meet the standards or definition of urbanisation. The image that comes to mind when thinking of the poorest children in the world is that of a child going hungry in a remote rural area in Africa. As much as this is the reality, there are hundreds of millions of children today living in urban slums, many without access to basic services. They are vulnerable to dangers ranging from violence and exploitation to the injuries, illnesses and death that result from living in crowded settlements atop hazardous rubbish dumps or alongside railroad tracks. And their situations – and needs – are often represented by aggregate figures that show urban children to be better off than their rural counterparts, obscuring the disparities that exist among the children of the cities (United Nations Children's Fund (UNICEF), 2012).

Urban slums are characterised by poor infrastructure, no water and sanitation facilities, no electricity (if there is electricity it is often obtained illegally), the people have no title deeds, and the municipality does not take care of areas like these because they are not officially recognised (rubbish collection, etc.) According to UNICEF (2012), by 2050, 70% of all people will live in urban areas. Already, one in three urban dwellers lives in slum conditions; in Africa, the proportion is a staggering six in 10. The impact on children living in such conditions is significant. From Ghana and Kenya to Bangladesh and India, children living in slums are among the least likely to attend school. Disparities in nutrition separating rich and poor children within the cities and towns of SSA are often greater than those between urban and rural children.

"Every disadvantaged child bears witness to a moral offense: the failure to secure her or his rights to survive, thrive and participate in society. And every excluded child represents a missed opportunity – because when society fails to extend to urban children the services and protection that would enable them to develop as productive and creative individuals, it

¹¹ A megacity is defined as a metropolitan area with a total population of more than 10 million people. A megacity can be a single metropolitan area or two or more metropolitan areas that converge.

loses the social, cultural and economic contributions they could have made” (UNICEF, 2012).

Continued uneven urban advances will perpetuate the current turmoil that developing countries find themselves in.

As mentioned before, urban economies are stronger and more self-sufficient than rural economies, although employment levels have not kept pace with growth in the working-age population. In rural areas, due to the fact that rural economies are not as productive as urban economies, employment levels are much lower and, even if people have jobs, their earnings tend to be very low. This leaves rural households heavily dependent on transfers from government (social grants) or family members working in urban economies. Such transfers assist in alleviating poverty, but do not compensate for the lack of self-sustaining economic activities. High levels of poverty in rural areas are also associated with substantial food insecurity.

“Another implication of this evidence is that stronger economic growth in large urban areas over the last decade has effectively funded the expansion on a large scale of social programmes to towns and rural areas. As a result, the fortunes of city and rural economies have become more interdependent. Other synergies between urban and rural areas include the supply of agricultural products to urban markets, and the growth of tourism and recreation in rural areas originating from the cities” (Turok, 2012:18).

The geography of the economy has not featured prominently in mainstream policy since 1994. Macro-economic concerns with inflation targeting, fiscal prudence and stability have taken preference over micro-economic measures to stimulate investment and growth, including industrial policy and spatial economic policy (Turok, 2012:19). Spatial inequalities in South Africa, largely driven by the discovery of precious metals (gold and diamonds) and the apartheid legacy, have resulted in the poor quality of urbanisation experienced in South Africa. Rural dwellers moving to the urban areas seeking jobs are forced into backyard shacks and overcrowded squatter settlements, which do not meet expected urban standards. These rural dwellers struggle to access the formal urban labour markets because of their limited skills and lack of education. Public services cannot keep pace with expanding slums and overcrowded conditions, which worsen social problems, disenchantment, crime and other antisocial activities. Therefore it is believed that migration of this nature should be discouraged because it is harmful and unmanageable, and that people would be better off back in rural areas. This is why rural development is so imperative for South Africa and its unemployment and poverty woes (Turok, 2012:20). Taking into account the fact that rural development will not happen overnight, there has to be an intervention regarding urban slum

dwellers that will run parallel to a rural development initiative. UNICEF (2012:8) identified four requirements that are needed in order to ensure that the inequality in urban areas is reduced:

- Improve the understanding of the scale and nature of urban poverty and exclusion affecting children. This will entail not only sound statistical work – a hallmark of which must be greater disaggregation of urban data – but also solid research and evaluation of interventions intended to advance the rights of children to survival, health, development, sanitation, education and protection in urban areas.
- Development solutions must identify and remove the barriers to inclusion that prevent marginalised children and families from using services, expose them to violence and exploitation, and bar them from taking part in decision making. Among other necessary actions, births must be registered, legal status conferred and housing tenure made secure.
- A sharp focus on the particular needs and priorities of children must be maintained in urban planning, infrastructure development, service delivery and broader efforts to reduce poverty and disparity. The international Child-friendly Cities Initiative provides an example of the type of consideration that must be given children in every facet of urban governance.
- Policy and practice must promote partnership between the urban poor and government at all its levels. Urban initiatives that foster such participation – and in particular those that involve children and young people – report better results not only for children but also for their communities.

Schunemann and Aucoin (2016) also state that, if African countries, particularly the countries with identified megacities, are to sustain economic development and the population increases, then the following hindrances need to be addressed: structural transformation, poverty, inequality and violence.

As mentioned before, rural development is imperative in the quest to curb unemployment and alleviate poverty. Rural development initiatives need to run concurrently with urban initiatives so that there is no lag period in which those living in urban slums are waiting for rural economies to be revived before they move back to the rural areas. Running the two initiatives concurrently will result in rural-urban migration occurring at a sustained rate. The rural areas of South Africa and Africa as a whole continue to suffer because of the following factors that were identified 35 years ago by Lundahl (1983) and that are still prevalent today:

- The development of the secondary sector has often proceeded at a much slower pace than elsewhere, including in Asia and Latin America.

- The density of the African population has been low, people are scattered over large areas.
- Infrastructural facilities are lacking (railway and roads have not been adequately developed and this in turn makes transport and exchange of all sorts of goods difficult and expensive).
- The development of commercially based food production in rural areas is hampered by the sex division of labour. In Africa, the women cultivate the fields whilst simultaneously being responsible for a host of household duties. As the population grows the demands on their time increase. Faced with diminishing returns to labour, they have to devote an increasing amount of time to cultivation in order to feed their families. Consequently, they find it more difficult to produce a surplus that can be sold outside the household.
- The development of commercially based food production is also hampered by the fact that modernisation efforts have been largely centred on non-food export crops, which leaves out the rural areas.
- African food producers have also had to compete with low-priced food imports, which are frequently the result of subsidies for food producers in developed countries. Moreover, these imports often enter Africa at overvalued exchange rates.
- Access to finance.

Rural development is unlikely to succeed without adequate investment in infrastructure in order to eliminate the divide between rural areas and urban areas. As mentioned before, successful rural development would also decrease the rural-urban migration shift, which strains the urban areas (large and megacities) and results in urban slums. Acknowledging the fact that agriculture is the main activity in rural areas, the next section will look at infrastructure and the role that it plays in both rural and urban economies.

3.3.3. Infrastructure: technology in agriculture is vital for attracting the youth

Insufficient and unreliable infrastructure services are common in the majority of rural communities in Africa. Rural households do not have access to safe drinking water, electricity, reliable transportation or modern communication services. These services support quality of life and form the basis of a robust and versatile economy. Additionally, the lack of connectivity via rural roads inhibits agricultural production and, in the absence of rural feeder roads, the cost of moving produce increases sharply (African Monitor, 2012). The development of infrastructure in rural areas not only reduces the cost of inputs and transport to markets, as mentioned above, but it also increases farmers' access to enlarged markets, eases trade flows and allows for value addition and crowd-in investments. Rural development depends largely on an effective rural infrastructure, functioning domestic

markets, appropriate institutions and access to appropriate technology (African Monitor, 2012).

Technology has played and continues to play a pivotal role in agriculture with regard to making farming profitable and assisting poor black smallholder farmers to earn a decent living in South Africa and in Africa as a whole. Rural development is therefore a beneficiary of technology in agriculture through the various linkages that technology unlocks in the agricultural space, making the success of rural economies a reality in some cases.

In South Africa, Vodacom has been rolling out a service called "know your farmer" to help subsistence farmers gain easy access to finances and markets. This big data platform is cloud-based and allows for the registration of a farmer's identity, landmarks and any information that could be required by the government should it need to provide farming subsidies (Vodacom, 2017). MTN also recently launched a livestock-tracking solution in Nigeria. Through this solution, which works through a solar-powered system that uses global positioning system (GPS) technology, herders are able to track the location of grazing cattle. The solution also sends emergency alerts to authorities when the livestock are exposed to danger. The technology is not yet available in South Africa (Area Gist, 2016).

In Kenya, the recently established Kenya Climate Innovation Centre (KCIC) offers support to climate-focused technology ventures in order to boost agricultural productivity and agro-processing. KCIC helps farmers cope with climate change and equips them with the technology and knowhow to counter the effects of climate change. Kenya also has the M-Farm programme, which offers farmers in Kenya three distinct services: real-time produce price information on 42 crops in five markets, collective crop selling by helping small-scale farmers bulk their produce, and collective input buying, enabling smallholders to buy inputs at discounted prices (Kenya Climate Innovation Centre, 2016).

In Zimbabwe, the Food and Agriculture Organization (FAO) has implemented an electronic voucher system to help cash-strapped small-scale farmers to access agricultural inputs. The e-voucher system is designed to improve the food security situation among vulnerable households through crop and livestock production. In Nigeria, the Growth Enhancement Support Scheme, a mobile technology initiative, is proving invaluable in innovation development. Through this initiative, farmers receive fertiliser and seed support through their mobile phones or 'electronic wallets' (Food and Agriculture Organization, 2016a).

As much as technology is playing a vital role in helping poor black farmers in rural areas across Africa (through access to finance, access to markets, collective input buying, coping

with climate change, etc.), technology alone cannot win this battle of agriculture playing a pivotal role in rural development.

3.3.4. Inequality in South Africa

Inequality is characterised by the existence of unequal opportunities and rewards for different social positions or statuses within a group or society. It contains structured and recurrent patterns of unequal distribution of goods, income, wealth, opportunities, rewards and punishments (OECD, 2016). In the context of South Africa, this unequal distribution was done based on race (apartheid), and the legacy of apartheid still lives on, with the majority of black South Africans being unemployed and poverty stricken.

Poverty in South Africa is profiled by shacks, homelessness, unemployment, casualised labour, poor infrastructure and lack of access to basic services. Income inequality still remains a challenge for South Africa as a country. This is due to persistent racial undercurrents that drive disparities and social stratification in South Africa as a whole. These disparities transcend income to negatively affect access to employment opportunities, education, quality health care and basic necessities such as electricity, water and sanitation. An analysis was conducted for an International Monetary Fund working paper to see how much lower inequality would be if the unemployment rate in South Africa was lower. To answer this question, Anand, Kothari and Kumar (2016) conducted simple partial equilibrium simulation exercises using data from the third wave of the National Income Dynamics Study (NIDS) conducted in 2012. While the partial equilibrium nature of the exercise is a limitation, they view this as a back-of-the-envelope calculation aimed at assessing the potential relationship between unemployment and inequality. The conclusion of the analysis was that large skill mismatches, poor educational outcomes and the apartheid legacy have hurt job growth and perpetuated inequality. “Unemployment, especially amongst the youth, women, and blacks, has remained high” (Anand *et al.*, 2016:20). While improving the quality of education remains key to addressing the long-term unemployment challenge, this analysis suggests that, until this happens (for education to be a reliable signal of productivity), policies aimed specifically at providing experience to young first-time entrants to the labour force will be important to improve their employability.

It is often said that South Africa is the most unequal society in the world. Although this is incorrect, it definitely is one of the most unequal nations in the world. The Gini coefficient is a measure of income inequality, ranging from 0 to 1, with 0 being a perfectly equal society and 1 representing a perfectly unequal society (World Bank, 2008). It should be noted that published Gini coefficients measure the distribution of income, not the distribution of wealth. This is because household wealth is notoriously difficult to measure. Other than the value of

property, and possibly share ownership in the stock market, it is hard to know how wealthy individuals are. Even property and shares may be held in trusts that are not easily linked to individuals. Prices of assets, including shares, may fluctuate considerably, and the values of things such as paintings or jewellery cannot be determined until they are sold.

“Wealth is also not the same as income. There are many examples of wealthy individuals living in homes that have over time appreciated hugely in value, but whose incomes are dramatically lower than their wealth suggests. Many individuals with high incomes consume all they earn and may even borrow heavily to support lavish lifestyles. Their wealth may actually be very low. Despite these problems, many commentators switch between talking about income and wealth inequality as if the two terms are synonymous” (Keeton, 2014:27).

Following the work of Kuznets, many economists have argued that inequality is an inevitable part of economic development. Kuznets maintains that, in developing countries, economic growth initially leads to increasing levels of inequality. Rich people save more than poor people, so inequality helps the process of capital accrual in underdeveloped countries. However, as economies develop, larger portions of their populations move from primary economic activities (agriculture) into other sectors of the economy (secondary and tertiary), and their skills bases expand. Therefore a point is reached where inequality falls. Rich countries, according to Kuznets, should be more equal than poor countries. Developing nations like Brazil have proven Kuznets’s theory wrong, as they have been able to sharply decrease their inequality levels through various policies. Social transfers, rising employment and higher minimum wages have helped increase the income of the poorest in Brazil and other Latin American countries, and thus decrease inequality.

South Africa’s Gini coefficient has been ranging between 0.660 and 0.696 over the past couple of years-making South Africa a highly unequal nation (OECD, 2016). The Gini index has however been found to have a number of limitations. The ‘income concept’ is one of them. Income can be defined at the household level weighted by household size or other scales, or at the individual level by taking into consideration financial holdings or just wage earnings. Each income definition provides a different measure of income and different levels of income inequality. Thus, differences in income theories can lead to differences in measures of income, inequality and the ranking of countries. A Gini index based on individual incomes is different from a Gini index based on household incomes for the same country. As a result, the rankings of countries change depending on whether the index is based on household incomes or individual incomes, creating some subjectivity in its use and interpretation.

The income of the informal sector is also excluded from the measurement of income inequality using the Gini index. In most developing countries, the informal sector accounts for almost 90% of employment. In agro-based subsistence-driven economies, income could exist in different forms other than money. Countries also have different income tax regimes: regressive, proportional and progressive, with some being more redistributive than others. Furthermore, two countries could have different income distributions but the same Gini index. For example, in a country where 50% of the people have no income and the other 50% of the people have equal income, the Gini index is 0.5. In another scenario, where 75% of people with no income account for 25% of a country's total income, and the top 25% of people with an income account for 75% of the country's total income, the Gini index will also be 0.5. Consequently, as a basis for ranking the differences in income inequality between countries, the Gini index could be misleading. The Gini index also does not capture social benefits or other interventions aimed at bridging inequality between rich and poor. Subsidised housing, health care, education and social grants for the vulnerable are measures that subsidise household incomes and reduce income inequality to some extent (Human Sciences Research Council, 2014).

The labour market is at the heart of inequality in South Africa, and central to labour market inequality is the quality of education.

Job creation, though crucial for poverty reduction, will also do little to reduce overall inequality. The weak endowments of those currently unemployed (lack of education being the main factor) will be the barrier that they face from entering the high labour market earning space. Thus even if they were employed, it would probably be at low wages (e.g. as a farm worker earning R105 per day), thus leaving wage and hence aggregate inequality high and little affected. In the absence of improved education, direct interventions to artificially change labour market outcomes also hold little prospect of improving poverty and distribution and may reduce the efficient functioning of the labour market, with various possible side-effects (Van der Berg, 2010:18).

Therefore, to reduce income inequality substantially, a different wage pattern based on better human capital for the bulk of the population (black youth) is a necessity.

“Without substantive improvements in the human capital of the poor income inequality will remain unacceptably wide. Much is made of the fact that South Africa already allocates a high share of resources to education relative to other developing countries. Given the backlogs and wide disparities in our society inherited from apartheid possibly even greater resources are needed. But even increased resources will help only if they are well used. This

will happen only with far greater political will and focus than is currently apparent” (Keeton, 2014:29).

The weak endowments of those currently unemployed cannot be changed overnight. Initiatives like the youth wage subsidy are some of the short-term remedies that have been implemented by the South African government, but more needs to be done to fundamentally change the structure of the South African economy.

Access to health care, or the lack thereof, is also a vital factor when looking at inequality. Health status influences human capital acquisition, economic status and the inter-generational transmission of socio-economic status, and access to health care plays a pivotal role in determining and reinforcing other measures of inequality (McLaren, Ardington, and Leibbrandt, 2014). Even when health services are provided free of charge, monetary and time costs of travel to a local clinic characterize the price of access to health care. These costs may pose a substantial barrier for vulnerable segments of the population, leading to overall poorer health for those vulnerable citizens in rural areas (McLaren *et al.*, 2014).

Upon this realisation of ‘skewed growth’ that has resulted in high unemployment, inequality and poverty, the South African president appointed the National Planning Commission (NPC), an independent government-initiated programme tasked with advising on issues affecting the country’s long-term development (National Planning Commission, 2011). The NPC then crafted the National Development Plan (NDP), which outlines the steps that the country needs to take in order to eliminate poverty and reduce inequality by the year 2030 – the Vision for 2030 as it is commonly known. The NDP’s key goals are aligned to the SDGs as set out by the UN (UN, 2015). The NPC adopted the use of the lower-bound poverty line (R443 in 2011 prices) with regard to its poverty targets outlined in the NDP. As of 2011, 32.3% of the population, or roughly 16.3 million people, were living below this poverty line. According to the poverty gap, roughly R31.7 billion per annum would be needed to eliminate poverty at this level. Of the 11 million new jobs that the NDP set out to achieve by 2030, close to one million will be created solely by the agricultural sector (NPC, 2011:197). This illustrates the important role that the industry has to play with regard to SA attaining sustainable economic growth, reducing inequality and eliminating poverty.

The NDP’s key aims, set out by the NPC in 2011, are as follows:¹²

- To reduce the proportion of people living in poverty from 39% to zero.

- To reduce the level of inequality.
- To create 11 million jobs by 2030.
- To boost export performance and raise the competitiveness of the economy.
- To improve the capacity of the state.
- To broaden the social wage: delivery of a package of services including housing, social grants, public transport, water, education, and health.

3.4. Conclusion

Unemployment and poverty will forever hinder the inclusive economic growth of any economy. South Africa has made noteworthy strides in improving the lives of its citizens since the dawn of democracy in 1994. As we can see from the figure below, the country's economic growth averaged 4.4% from 2001 to 2007, whilst unemployment averaged 25% for the same period (Quantec, 2018). South Africa's unemployment rate has since continued on the same trajectory of 25%, reaching a high of 27.7% in the first quarter of 2017 (Stats SA, 2017). Economic growth has been declining steadily since 2007, hovering around 1% over the past few years (Stats SA, 2018).

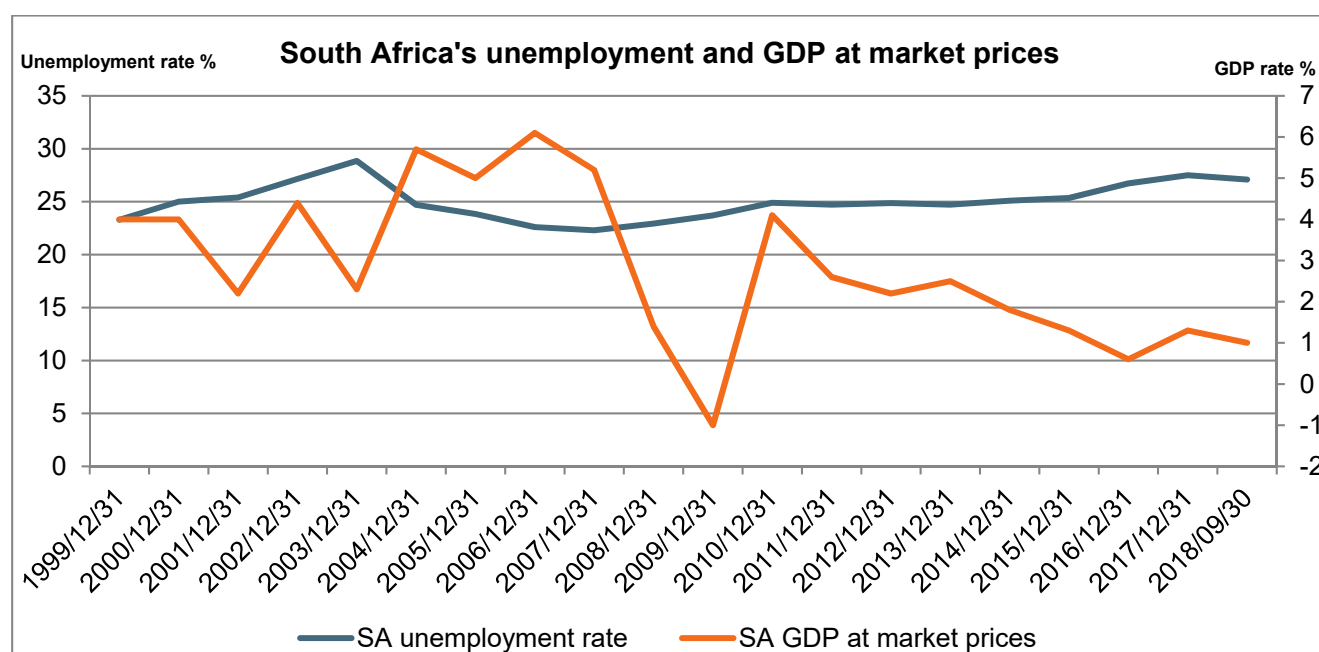


Figure 6: South African unemployment rate and GDP rate (Quantec, 2018).

When South Africa was recording modest to high economic growth rates of 4% to 6%, unemployment averaged 25%, and now that South Africa is struggling to attain 1% growth,

the unemployment rate is still hovering around the 25% mark. Given South Africa's structural weakness and historical backlogs, economic growth needs to be accelerated at a rate that exceeds population growth. This would ensure that income per capita increases as the labour force increases (Netshitenzhe, 2013). South Africa has failed to achieve economic growth that exceeds the population growth rate, which is why the country is one of the most unequal nations in the world with one of the highest rates of unemployment in the world.

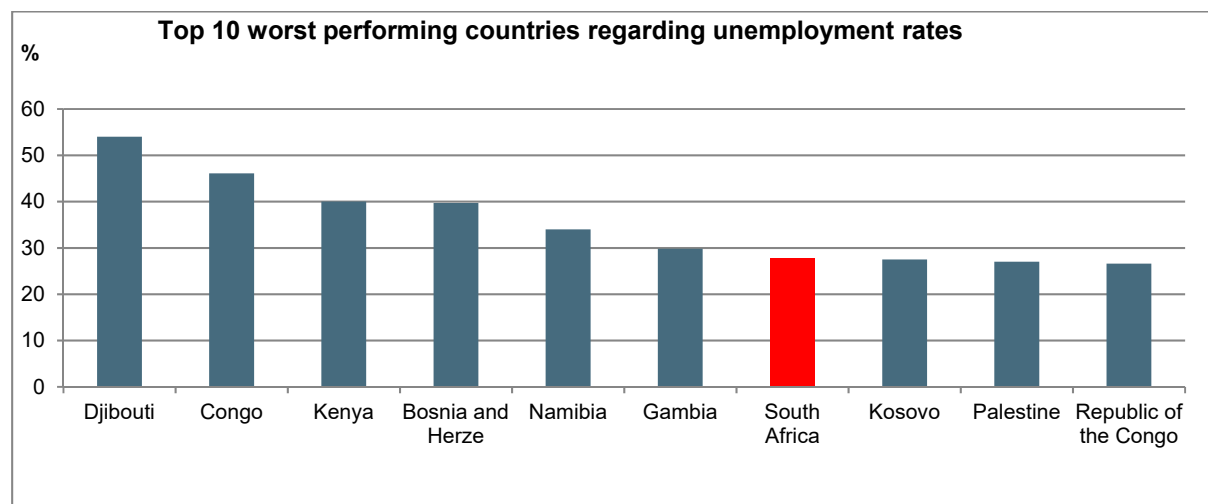


Figure 7: Top 10 worst performing countries regarding unemployment (Trading Economics, 2017¹³).

Considering the fact that black people are the majority population in South Africa, and that the youth are the majority within the racial segment, it is evident that the black youth are the most affected group regarding poverty and unemployment.

Taking into account that 9% of the 11 million new jobs that the NDP has set out to achieve will be created solely by the agricultural sector, it is also imperative that the growth of the agricultural sector occurs concurrently with that of non-agricultural sectors, as opposed to one sector being prioritised over the other- this will result in a sustainable rural-urban shift and subsequently reduce inequality, unemployment and poverty.

Inadequate and unreliable infrastructure services are common in the majority of rural communities in Africa. Infrastructure is a key enabler in easing the pressure that megacities face due to rural dwellers flocking to urban areas in search of better economic opportunities. Technology, which plays a pivotal role in assisting poor subsistence farmers in rural areas, cannot be utilised optimally without adequate overall infrastructure development – roads and

¹³ The latest figures released by each country were used. Some countries last released their unemployment statistics in December 2010 (Djibouti), while Namibia releases its unemployment statistics on a yearly basis, therefore the latest figure for the country is for December 2016.

railways, water and sanitation, health services and electricity. Education and skills attainment, especially amongst the rural youth, is another vital pillar in the quest for rural development to play a more meaningful role in the economy and to decrease rural-urban migration. There needs to be a strong balance between urbanisation and rural development, as opposed to the former developing and the latter experiencing no development. The development of an economy calls not only for developing the non-agricultural sectors but for developing agriculture as well. Failing to pay attention to the latter sector may jeopardize the entire development process. Agriculture should not be allowed to become a lagging sector, as this will pose obstacles to the development of the rest of economy. The development of rural infrastructure not only reduces the cost of inputs and transport to markets, but it also increases farmers' access to enlarged markets, facilitates trade flows and spurs value addition and crowd-in investments (African Monitor, 2012).

What is of concern though is that the results of the empirical study that was conducted show that the black youth of South Africa do not see the potential that lies within the agricultural sector, and this needs to change¹⁴. Meaningful participation in the agricultural sector by the black youth of South Africa would change the current situation of vast poverty and unemployment in the group, and the vacant jobs that exist in the agricultural sector would then perhaps be filled.

The next chapter will look at the role of the agricultural sector regarding addressing the problem of unemployment and poverty amongst the youth. The chapter will also look at the efforts that have been made in order to curb youth unemployment, as well as various hindrances that face the youth of South Africa, resulting in their disinterest and minimal participation in the sector.

¹⁴ The empirical study conducted supports this statement. The results of the empirical study are presented in chapter 5.

Chapter 4: Addressing the problem of unemployment and poverty amongst the black youth of South Africa: the role of the agricultural sector

4.1. Introduction

The challenge of youth unemployment in South Africa is shaped by factors in the labour market and the education system, alongside intricate community, household and individual-level issues. Despite much policy attention and a range of public and private interventions having been implemented, youth unemployment rates, especially amongst the black youth, have remained high since the country's transition to democracy. The citizens of South Africa have voiced their dissatisfaction with the unemployment situation. In the month of January 2016, thousands of supporters belonging to the main opposition party in South Africa, the Democratic Alliance (DA), took to the streets of Johannesburg to protest against widespread unemployment and government corruption. Addressing supporters in the Johannesburg City Centre, DA leader Mmusi Maimane said nearly two million South Africans had lost their jobs since 2009. "We march today for jobs. We march for the freedom that having work brings. We cannot build a prosperous future for South Africa when 8.4 million South Africans are unemployed," he said (eNCA, 2016). Maimane said 770 people were losing their jobs daily in the country, but government was doing little to change the trend. He also alleged that the ruling African National Congress (ANC) party, which fought for South Africa's liberation from apartheid, had become corrupt and forgotten the struggles of unemployed people (eNCA, 2016).

This chapter looks at how the agricultural sector can play a meaningful role in salvaging youth unemployment and poverty alleviation.

4.2. Employment in the agricultural sector

The 2018 third quarter Quarterly Employment Statistics (QES) survey showed that an estimated 11 255 000 people were employed in the formal non-agricultural sector of the South African economy. This reflected a quarterly decline of 65 000 employees and a year-on-year decrease (2017 to 2018) of 125 000 employees (Stats SA, 2018). With regard to the agricultural sector, 842 000 people were employed in the sector during the third quarter of 2018, down from 843 000 people in the previous quarter.

Stats SA (2010) shows that most economic sectors, including the agricultural sector, shed a substantial number of jobs between 2008 and 2010 as a result of the recession. Apart from the job losses that the agriculture sector experienced due to the recession, it had already experienced substantial job losses between 2001 and 2007. According to the Stats SA (2015), 969 000 people were employed in agriculture in 2001. By 2012, that figure had

declined to 638 000 people, a loss of 331 000 jobs in the sector, or a decline of 34%. The data also showed that, in 2001, 7.8% of the South African workforce was employed in agriculture, a figure that had declined to 5% as of the third quarter of 2018 (Stats SA, 2018). During the same period that the agricultural sector experienced substantial job losses (2001-2007), South Africa's economic growth rate averaged 4.3%, peaking at 5.3% in 2006 (South African Reserve Bank, 2008). Structural transformation is essential for economic development and it is widely agreed by economists that economic development generally goes parallel with a declining share of agriculture in economic growth and employment, ultimately leading to structural transformation of the economy from agriculture to industrial and the services sector (Hnatkovska and Lahiri, 2013).

The figure below depicts how the agricultural sector's share in total GDP slightly declined from 3.2% in 2001 to 2.8% in 2007, and the industrial and services sector's share of GDP slightly increased (finance, real estate, and business services went up from 17% in 2001 to 20% of total GDP by 2007) during the period that South Africa's economic growth rate averaged 4.3%, supporting the notion that as a country develops, the structural transformation of the country changes from depending on agriculture (primary sector) to depending on the industrial and the services sector.

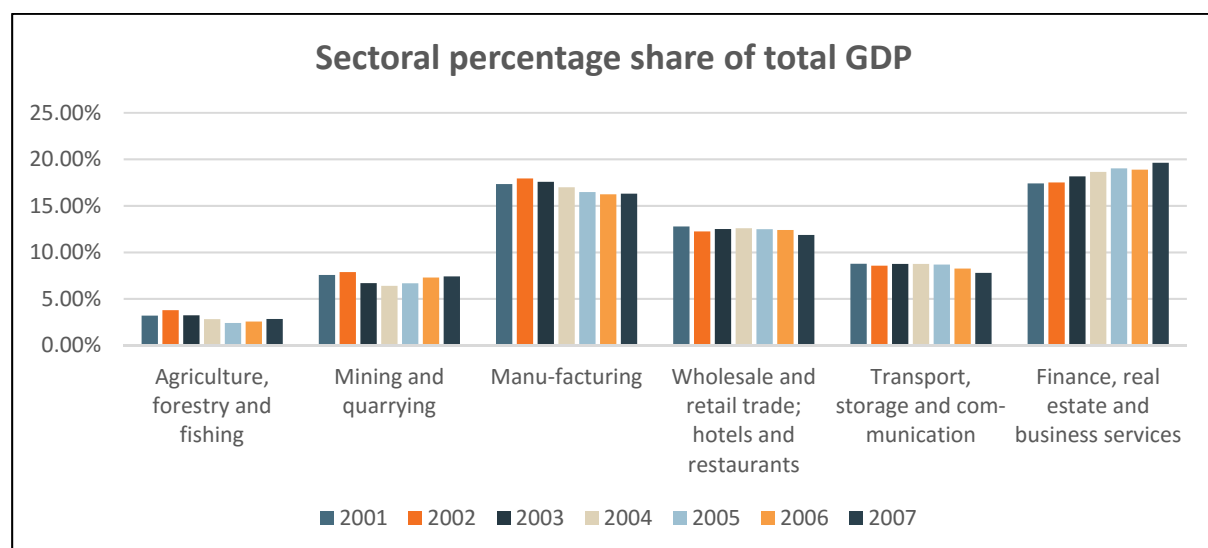


Figure 8: Sectoral percentage share of total GDP (Stats SA, 2008).

In spite of the structural transformation that South Africa experienced during the period 2001-2007, unemployment was still relatively high considering the economic growth that South Africa was experiencing.

“More employment seems to have been created in the informal sector rather than in the formal sector, thus widening income inequality and the gap between the first and the second

economy. The jobs created by the informal sector are of a low value-adding nature, while the formal sector makes the greater contribution to wealth creation and GDP. Indeed, South Africa's Gini coefficient, reflecting income inequality, has increased from 0.57 in 1992 to 0.70 in 2008" (Du Toit & van Tonder, 2009:15).

Table 7: Labour employment, capital labour ratio and GDP/employment ratio: 2000-2008 (Mahadea and Simson, 2010).

	Average capital labour ratio in Rand	Labour employment index	Change (%)	Ratio of GDP growth to employment growth
2000	124 236.00	100.00	-	-
2001	123 024.00	98.40	-1.6	-1.68
2002	121 918.00	117.80	19.4	0.19
2003	121 436.00	135.10	17.3	0.18
2004	121 630.00	140.70	5.6	0.88
2005	122 556.00	150.20	9.5	0.53
2006	124 563.00	167.10	16.9	0.31
2007	127 912.00	175.80	8.7	0.59
2008	132 670.00	179.00	3.2	0.97

Mahadea and Simson (2010) analysed the relationship between unemployment and GDP by linking the change in GDP to the change in employment, in order to ascertain the responsiveness of employment to changes in economic growth (ratio of GDP growth to employment). They found that South Africa's job creation performance against GDP has been weak (far less than one) for the period 2001-2007, with the majority of the unemployed ending up in the informal sector-which has very low wages.

"The increase in the average capital-labour ratio from R124 236 in 2000, to R132 670 in 2008, reflects a rising capital intensity in production as opposed to the desired increase in labour intensity in production. "The average output labour ratio improved from R49 662 in 1994 to R63 437 (at constant 2000 prices) in 2008" (Mahadea *et al.*, 2010:4).

The jobless growth that South Africa experienced can be linked to other issues that the country still faces, with education being one of the main issues. The majority of the workforce in South Africa has a low level of education so when there is economic growth, the economy is not able to absorb most of the workforce because the jobs available as the

structure of the economy changes, require a certain level of education that is currently scarce amongst the workforce.

In South Africa there are an average of 15 571 vacant job opportunities in professional fields in agriculture each year. In spite of this, fewer than 3 000 students graduate each year to fill these positions (Kriel, 2015). As stated before, the majority of the South Africa population is the black youth. If the young black youth become farm workers it would improve the unemployment figure, but this would not address the pressing matter of poverty because of the low wages that farm workers earn. Substantial gains would only be realised if the black youth start filling the vacant professional agricultural jobs and become entrepreneurs in the agricultural space-and this can only be obtained through changes in the education system and more young people pursuing agriculture-related studies at a post-matric level.

Stellenbosch University is one of the leading institutions in the country when it comes to agriculture. A look at the number of black students who have graduated from Stellenbosch University in the recent past indicates that the black youth are not acquiring the basics (a bachelor's degree) in order to penetrate the agricultural sector.

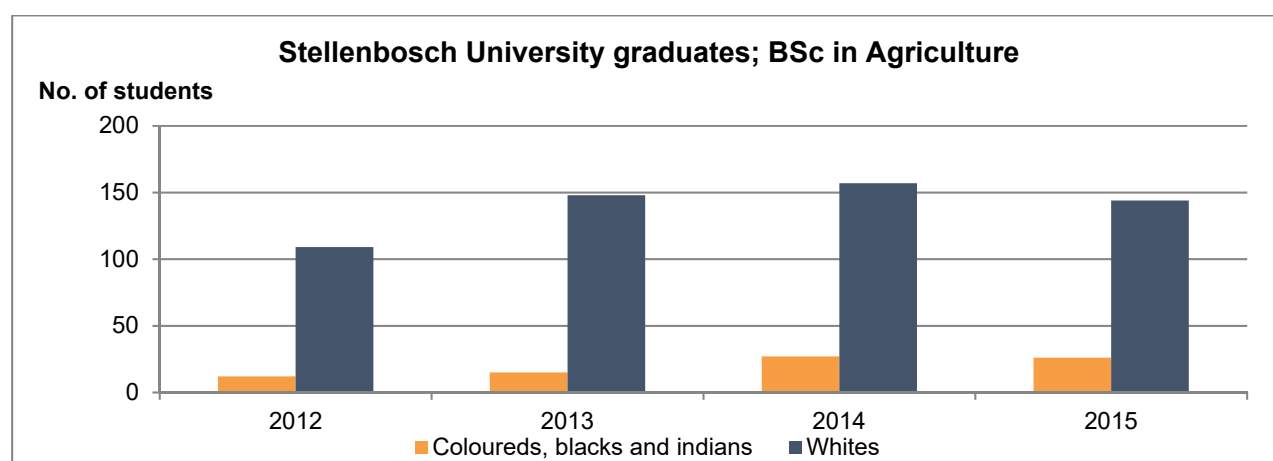


Figure 9: Stellenbosch University graduates; BSc in Agriculture (Stellenbosch University, 2016).

Figure 9 indicates that there are a lot more white students who graduate in agriculture related studies than black students. The number of black students currently pursuing a BSc in Agriculture tells a different story, but what is clear is that the sector definitely needs to be promoted amongst the black youth of South Africa, because these numbers do not correlate with the national population statistics, where black youth are the overwhelming majority.

Poor wages in the agricultural sector are a major issue and job seekers tend to seek employment in other industries that offer better wages. While increasing agriculture unemployment arguably deepens poverty in the rural areas, some authors do not see agriculture employment being effective in helping farm workers to secure a minimum living standard. For example, Jacobs (2009) argues that the low agricultural wages are inadequate to lift wage-dependent rural households permanently above a socially acceptable deprivation threshold, because the largest share of it is spent on staple agro-foods, which means that their food security status is very sensitive to food price shocks. According to the Department of Labour (DoL) (2013), farm workers earn the lowest wages among those formally employed in the country. Unlike many other countries, the minimum wage in South Africa is different for each sector. There is thus currently no single national minimum wage. Even within a particular sector the mandated wage can vary by occupation type, number of hours worked, or geographic location, and this is specified in a 'Sectoral Determination', which includes regulations on working hours, overtime pay, and written contracts, among other employment stipulations. The body responsible for guiding state legislation on the various sectoral determinations is the Employment Conditions Commission (ECC). The ECC is a representative body within the DoL established in order to advise the minister of labour on appropriate and feasible sectoral wage schedules (DoL, 2013).

The sectoral determination for farm workers was first announced in December 2002 and became effective in March 2003 (Department of Agriculture, Forestry and Fisheries, 2013). Minimum wages for farm workers were initially set at R650 per month for workers in areas loosely classified as 'rural' and at R800 per month in areas classified as 'urban', with plans to adjust the minima upwards each year. When the minimum wage was introduced in 2003, more than 80% of farm workers were earning less than the urban minimum, and over 60% were earning less than the rural minimum. In November 2012 farm workers in the Western Cape went on strike demanding R150 per day as the minimum wage. At the end of the strike, the farm workers and farmers settled on R105 per day; "the new level of the minimum wage for 1 March 2013 to 28 February 2014 is to be pegged at R105 per day for employees who work 9 (nine) hours a day or R11.66 per hour, R525 weekly or R2 274.82 per month" (DoL, 2016). The latest minimum wage for farm workers is set out in Table 8.

Table 8: Minimum wages for employees in the farm worker sector (Department of Labour, 2016).

Minimum wages for employees in the farm worker sector		
Minimum rate for period	Minimum rate for period	Minimum rate for period
1 March 2016 to 28 February 2017	1 March 2017 to 28 February 2018	1 March 2018 to 28 February 2019
Monthly: R2 778.83	Previous year's minimum wage + CPI + 1%	Previous year's minimum wage + CPI + 1%
Weekly: R641.32		
Daily: R128.26		
Hourly: R14.25		
Note: the abovementioned is applicable to an employee who works nine hours a day. The CPI to be used is the available CPI excluding owners' equivalent rent, as released by Stats SA six weeks prior to the increment date.		

As much as there are plans to improve the minimum wage for farm workers, the wage is definitely too low and would most definitely not attract the black youth at all. One of the main reasons why the agriculture sector needs to be promoted and advertised amongst the black youth of South Africa is to make the youth aware that there is more to the sector than just being a farmer or farm worker. Growing up, black children would only have seen their grandparents struggling to earn a decent income in the rural areas as farmers. Considering the figures above, it is safe to say that the black youth of South Africa should not be looking to become farm workers, as this will not help to break the cycle of poverty amongst black people of South Africa.

Table 9: Salary indications for four relatively entry level occupations in 2015 (Bureau for Food and Agricultural Policy, 2017:35).

Sector	Monthly income (Rand)
Farm worker minimum wage	R2 420.00
Hospitality sector (minimum wage)	R2 751.00
Taxi driver (minimum wage)	R2 872.00
Entry-level mine worker	R6 000.00

Table 9, which summarises the 2014/2015 salary levels for farm workers, hospitality workers, taxi drivers and entry-level mine workers, reiterates that, at the entry level, farming is definitely not an attractive sector and the youth cannot be frowned upon for not wanting to participate in the sector at this level. Due to the volatility of the agricultural sector (adverse weather conditions and volatile commodity prices), the R2 420 farm worker salary is also not guaranteed because, if there is a drought for example, a farm owner will not need the farm worker's labour as there will be minimal agricultural activity and poor returns. The other sectors (hospitality, taxi driver, mine worker) are therefore considered to be relatively risk free compared to farming, as employees in these other sectors are more certain of receiving a salary at the end of the month. Table 9 clearly reiterates the point that the black youth should not be looking to become farm workers but rather be exposed and pursue commercial farming and other lucrative careers within the agricultural sector.

South Africa forms part of the global economy and is therefore affected by exogenous economic shocks. De Waal and Van Eyden (2013) investigated the impact of economic shocks in the rest of the world on South Africa with the use of a global vector auto regression (GVAR) model from the second quarter of 1979 to the fourth quarter of 2009. They found that the long-term impact of a shock to Chinese GDP on the South African GDP was 330% stronger in 2009 than in 1995, due to the substantial increase in South Africa's trade with China since the mid-1990s. By 2005, a United States (US) GDP shock only had a quarter of the long-term impact on South Africa's GDP compared to 1995, as trade with the US declined noticeably. An example of a recent shock to the global economy and how it has impacted South Africa is China's loss of appetite in raw commodities due to the fact that the country is shifting from being a manufacturing powerhouse to focusing on services and consumer spending (IMF, 2016b). The link between global economic activity and open

economies cannot be ignored. However, each country is meant to have a set of policies that ensures that the domestic economy is able to thrive (or at least maintain a certain minimum level of growth) amidst global turbulence.

The current South African government has produced sound economic policies for the betterment of the country throughout the years it has been governing. The major problem has been the implementation of these policies; this is where the government has been failing and continues to do so. These failures have resulted in slow economic growth, which subsequently leads to unemployment as the economy is not able to absorb the unemployed. As a result, the majority of South Africans become trapped in poverty. Regarding the youth, the youth wage subsidy¹⁵ was introduced by the South African government in response to an alarmingly high youth unemployment rate.

The youth wage subsidy works through providing an Employment Tax Incentive (ETI) to employers. The ETI provides a subsidy of up to R1 000 a month to employers of people aged between 18 and 29 earning less than R6 000 in their first formal jobs. This falls to R500 in their second year on the job and falls away in the third. It effectively introduces a two-tier labour market that makes young workers cheaper without actually reducing their wages (Steyn, 2015). The incentive is only applicable to salaries from R2 000 a month upwards, but terminates at R6 000 a month. If there is no sectoral minimum wage, as legislated by the ministry of labour, the monthly minimum wage required for the incentive is R2 000 (South African Institute of Tax Professionals [SAIT], 2016). Although the ETI was set to expire on 31 December 2016, National Treasury (NT) proposed that the ETI be extended by two years until 28 February 2019 in order to promote more youth employment (SAIT, 2016).

Policies such as the ETI do their best to curb youth unemployment but a more concerted effort is required to decrease youth unemployment substantially.

4.3. Attracting the youth to the agricultural sector

Towards 2050, rising population and incomes are expected to call for 70% more food production globally, and up to 100% more in developing countries, relative to 2009 levels. With the exception of Africa, the land and water resources supporting agricultural production are constrained to a point where their capacity to meet current and future needs is seriously jeopardised. Food producers thus need to increase their output, but are faced with the

¹⁵ The Youth Wage Subsidy, which came into being through the Employment Incentive Act No 26 of 2013 (ETIA), allows employers to claim a deduction on the amount of PAYE they have to pay over to SARS based on the number and salary of qualifying employees, provided that certain conditions are met.

constraint of limited resources (FAO, 2016b). According to the United Nations (2014), more than half of global population growth between 2015 and 2050 is expected to occur in Africa. Of the additional 2.4 billion people projected to be added to the global population between 2015 and 2050, 1.3 billion will be added in Africa. With 200 million people aged between 15 and 24 (the youth bracket), Africa has the youngest population in the world and will continue to have the youngest population going forward. The reasons for this are as follows:

- High-fertility countries in Africa: The world has 21 countries that are regarded as "high fertility", meaning that the average woman has five or more children over her lifetime. Of those, 19 are in Africa (and the other two are in Asia). The largest is Nigeria, and it is expected that Nigeria will have 10% of the world's births by 2050.
- Major gains in life span: life expectancy in Africa rose by six years in the 2000s, double the global average. Africa's average life expectancy is expected to gain about 19 years by 2100, rising to age 78.
- Major declines in child mortality: In the past decade, the rate of deaths among children under the age of five dropped from 142 per 1 000 to 99 per 1 000. The global fall was from 71 per 1 000 in 2000-2005 to 50 per 1 000 in 2010-2015.

The story of Africa's worrisome youth unemployment is often told alongside the story of the continent's fast and steady economic growth. While six of the 10 fastest-growing economies in the world are in sub-Saharan Africa, the unemployment rate for that region is 6%, according to the African Development Bank (AfDB) (2016). "Compared to the world average of about 5%, its rate may not seem that high. But the problem is that in most African countries, youth unemployment occurs at a rate more than twice that for adults. The youth account for 60% of all African unemployment" (AfDB, 2016). Young women feel the sting of unemployment even more sharply. The AfDB found that, in most countries in sub-Saharan Africa and all of those in North Africa, it is easier for men to get jobs than it is for women, even if they have equivalent skills and experience.

As noted earlier, Africa does not face the constraint of limited arable land and water. The problem with Africa is that, because of poor infrastructure, the land and water are in fact underutilised. Sub-Saharan Africa has two abundant resources: its youth and agricultural land. With the youngest population globally and a quarter of the world's arable land, Africa stands to benefit greatly from getting and keeping the youth involved in agriculture" (Jayaram, Riese, and Sanghvi, 2010). The importance of getting and keeping the youth involved in agriculture is therefore imperative. This chapter will continue to look at the importance of getting the South African youth involved in agriculture, steps that can be taken

to attract the youth to agriculture, and South Africa's policies regarding the youth and agriculture.

4.3.1. Methods of attracting the youth to the agricultural sector

"Agriculture is not glamorous. It suffers from entrenched negative perceptions. In the minds of many African youths, a farmer is someone like their parents, doing backbreaking labour in the fields and getting little to show for it" (United Nations, 2015). The youth do not have a strong conviction that agriculture can be a lifelong career choice that is able to provide their wants and needs.

The FAO (2016b) has been taking part in various activities and tools in order to promote decent youth employment in agriculture around the globe. The youth makes up roughly one fifth of the population of developing and emerging economies. In SSA alone, more than 10 million new jobs per year will have to be created in rural areas in the next two decades to absorb the new entrants in the labour force. There is a largely untapped reservoir of employment opportunities in agriculture. The drudgery and poor remuneration associated with low-productivity family farming turn young people away from agriculture and make them more prone to migrate from rural areas. Maintaining interest in farming as a profession is vital to future food security and agriculture development. We need to 'cultivate' the young generation of farmers, food entrepreneurs, scientists, agronomists, extension agents, union and government leaders (FAO, 2016).

On the basis of the survey conducted and the key findings presented in Chapter 5, the following points have been identified as the key points that need to be addressed in order to attract and keep the black South African youth involved in the agricultural sector:

- Education
- Media (social media, television, radio, newspapers, etc.)
- Technology in agriculture
- Policy framework

4.3.1.1. Education

As pointed out in Chapter 3, the black youth that are fortunate enough to pursue higher education do not even enrol in agriculture-related studies at the tertiary institutions in South Africa. The fact that agriculture is not glamorous is a huge factor. The black youth of South Africa are also not aware that they can pursue studies of this nature, and thus do not know of the opportunities that lie within the agricultural space. From the survey it also became

apparent that agriculture is not offered as a subject at many high schools, at least according to the participants who completed the questionnaires (the sample). It is important to note that there are many high schools across South Africa that specialise in agriculture, some of which are listed in the table below (Schools 4 SA, 2016).

Table 10. List of schools specialising in agriculture in SA (Schools 4 SA, 2016).

Province	Area in the province	School name	Contact details
Free State	Bothaville	Nampo Agricultural Secondary School	0565153951
Free State	Phuthaditjhaba	Seotlong Agricultural Secondary School	0587140127
Free State	Hoopstad	Kgotso Agricultural Secondary School	0534441231
Eastern Cape	Alice	Phandulwazi Agricultural High School	0406531149
Eastern Cape	Cradock	Hoër Landbouskool Marlow	0488813121
Eastern Cape	Fort Beaufort	Winterberg Agricultural High School	0466451168
Gauteng	Krugersdorp	Hoërskool Bekker	0145771324
North West	Rustenburg	Tshare Primary School	0122701168
Polokwane	Mashashane	Joel Siba SA Senior Secondary	0152241094
Polokwane	Siyandhani	Kheto Nxumayo Agricultural High School	0158123315
Polokwane	Bolobedu	Mandela Barloworld Agricultural High School	0727534833

There are also agricultural colleges across the country that offer agriculture at the higher education level (Schools 4 SA, 2016). These are listed in the table below;

Table 11. List of agricultural colleges in SA (Schools 4 SA, 2016).

Province	Courses offered	Name of institution	Contact details
Western Cape	Resource management; research and technology; veterinary services; plant and animal production	Elsenburg	0218085451

North West	Agricultural management; plant and animal production	Taung	0539949800
North West	Agricultural management; plant and animal production	Potchefstroom	0182996721
Mpumalanga	Water management; crop production; soil science; forestry; agricultural management	Nelspruit	0137533064
Limpopo	Animal production; plant production and mixed farming; irrigation management; agribusiness	Madzivhandila	0159627200
Limpopo	Animal production; plant production	Tompi Seleka	0132689300
KwaZulu-Natal	Crop production; animal health; mechanical engineering; animal production; agricultural economics; soil science; ecology	Cedara	0333559306
KwaZulu-Natal	Crop production; animal health; mechanical engineering; animal production; agricultural economics; soil science; ecology	Owen Sithole	0357951345
Free State	Animal production; agricultural management; crop production; agribusiness	Glen	0518618637
Eastern Cape	Crop and animal production; animal health; agribusiness; marketing and forestry	Fort Cox	0406538033
Eastern Cape	Animal production; agricultural management; pastures and crops; agricultural technical services	GADI	0498026600
Eastern Cape	Animal production; crop production	kuTsolo	0475420107

The problem with all of these institutions is the attention and assistance that they receive from government and the private sector with regard to resources. In order to address the skills-mismatch that South Africa is currently experiencing, South Africa's entire education system needs to be attended to and a serious overhaul is required-from the foundation phase right through to tertiary education.

Results from international, standardised tests show that between 75% and 80% of South African schools are not able to impart the necessary skills to students. It is a well-known fact that black children suffer more when it comes to education, because the most dysfunctional schools are those in the townships and rural areas. South Africa's basic education minister has admitted that about 80% of South African schools are dysfunctional (Mail & Guardian, 2015).

4.3.1.2. Media

The word 'media' is derived from the word medium, signifying mode or carrier. Media are intended to reach and address a large target group or audience. The word was first used in respect of books and newspapers, i.e. print media, but with the advent of technology, media now incorporate television, movies, radio and the internet. In today's world, the media have become as essential as our daily needs. The media of today play an outstanding role in creating and shaping public opinion and strengthening society (Oxford Learner's Dictionary, 2019).

Communication about agriculture is not seen as a major priority at either the national or international level, and the role of the media as an effective player in agricultural and rural development is undervalued. Reporting on agriculture is largely restricted to natural disasters, food shortages and rising food prices – this was also reiterated in the empirical findings of the survey. The media has a potentially broader role in raising the profile of agriculture amongst decision makers as well as the wider public, and in communicating farmers' needs.

Traditionally the use of the media has been about communicating research messages when there are success stories in particular. But journalists have the potential to be more of agents of change themselves. They are in quite a unique position, potentially being the voice of policymakers, the voice of farmers, and the voice of researchers. The essential role of the media is to create opportunities for farmers to express themselves directly on the air: this is the only way that they will have a say and therefore participate in the decision process. Secondly media can also provide a platform through which the farmers can engage with

policymakers, so that their perspectives can be taken on board. Thirdly the media can also profile the work of farmers so that lessons and experiences can be shared (FAO, 2016b).

With regard to South Africa and promoting the agricultural sector through the use of media, there is a lot that can be done. This is not to say that there is currently no media coverage of agriculture. In fact, there is:

- A programme called “Living Land” on SABC 2. “The programme provides valuable information and expert know-how on literally every conceivable aspect of farming. It also unveils the secrets of marketing fresh produce and explores avenues of value-added income generation by way of enhancing and processing agricultural products” (Facebook, 2016).
- *Farmer’s Weekly*, the oldest agricultural magazine in South Africa, serving as a mouthpiece for the agricultural industry and keeping readers informed.
- Various institutions that release publications on a daily, weekly, monthly, quarterly and annual basis, e.g. ABSA and its annual Agricultural Outlook booklet, the Agricultural Business Chamber (Agbiz) and its daily reports by Wandile Sihlobo and Tinashe Kapuya, Wandile Sihlobo’s weekly column in *Business Day*, and many other publications across various media platforms.
- The NAMPO Harvest Day, one of the largest privately organised and owned exhibitions in the world, is hosted annually at NAMPO Park in Bothaville in the Free State. Organised by Grain South Africa, it provides a unique opportunity for all manufacturers and distributors of agricultural machinery, products and services to exhibit, as well as to demonstrate their vast range of products to their targeted customers – the farmers of South Africa.

The International Journal of Advanced Multidisciplinary Research and Review (2015) reviewed the application of Information, Communication and Technology (ICT) to agriculture in Nigeria. The data for the study was collected through qualitative research as opposed to quantitative. Some of the findings of the paper were that ICT is beneficial and applicable to the agricultural sector, ICT will attract young graduates to the agricultural sector and create employment, and that there has been negative media portrayal of agriculture. Some of the participants of the study stated the following;

“When you watch our Nigerian movies today, it is grandfathers that are farmers...you just picture this old person in the farm; no rich person is into agriculture from what we watch in the movies. Farming only happen in the villages not in the cities, that’s how it is depicted in the movies. Another participant also affirms that the media portrays the negative aspect of agriculture. He further states that he thinks they portray agriculture as dying instead of

portraying it as something that can bring life and resources” (The International Journal of Advanced Multidisciplinary Research and Review, 2015:41).

More awareness regarding the agricultural sector is needed so that the audience is increased. For example, the Living Land show on SABC 2 is broadcast at 5:30 am – rightfully so, because that is when farmers are awake, but there should be a repeat during prime time so that everyone, especially the youth, can view the show. More TV and radio shows are needed to create awareness and spark an interest in agriculture. The relevant written media circulates amongst those who are involved in the sector, hence this barrier needs to be broken and a platform needs to be created where all members of society are made aware of all these publications. Agriculture is very prominent on social media platforms such as Twitter and Facebook, but a lot more can be done to ensure that everyone is aware of and talking about agriculture. The prominence in social media is only found if you search for “agriculture”, as it is rare that agriculture will be a trending topic on these social media platforms.

4.3.1.3. Technology in agriculture

Technology has played a big role in developing the agricultural industry. The use of technology in agriculture reduces the strain on the natural resources of the earth whilst simultaneously increasing the output of production; this is essential considering the growing global population and food security. The use of technology in agriculture also attracts the youth to farming; this is an important factor considering the fact that the average age of a farmer is 62 years in South Africa (United Nations, 2014). Consumers also increasingly want to know exactly what it is that they are consuming and its origin, and the use of technology assists in this regard.

Technology has transformed and continues to transform the agricultural sector. From the stages of original agriculture, traditional agriculture and mechanised agriculture, agriculture has now entered the stage of modern technology being applied to the sector.

On the domestic front, various companies across all sectors have been involved with utilizing technology in agriculture (McKinsey and Company, 2016):

- John Deere is taking the internet of things (IoT) out into the field and boosting efficiencies with the goal of improving per-acre crop yields. They are using Big Data to step into the future of farming. This interconnectivity with owners, operators, dealers and agricultural consultants helps farmers enhance productivity and increase efficiency. Sensors on their

equipment help farmers manage their fleet and decrease the downtime of their tractors, as well as save on fuel. The information is combined with historical and real-time weather data, soil conditions, crop features and many other datasets.

- Nedbank is promoting and rewarding agricultural best practice and innovation. The bank has invested R8.3m in the conservation group WWF SA's Sustainable Agriculture Programme, an initiative that tackles food security challenges and protects natural resources through sustainable and innovative measures.
- AgriProtein is a South African start-up growing insects for animal feed using waste. In December 2016, the start-up raised \$17.5 million in growth-stage funding from strategic investors in Europe, North America and Asia.
- The Biopark@Gauteng initiative is a result of the collaborative efforts between The Innovation Hub Management Company, the Gauteng Department of Agriculture and Rural Development, eGoliBio, and the Gauteng Department of Economic Development. BioPark@Gauteng is a biosciences incubator that offers opportunities for commercialisation to early-stage biotech companies by providing business development support. BioPark@Gauteng leverages off the Maxum Business Incubator and eGoliBio Life Sciences Incubator for the physical and virtual incubation of biotech companies. BioPark@Gauteng currently incubates 20 pre-commercial and commercial companies.

Today's society can benefit from agricultural advancements and live sustainable lives by improving the production, harvest methods and distribution of agricultural goods.

One of the participants in the study conducted by The International Journal of Advanced Multidisciplinary Research and Review (2015) noted that the Nigerian youths are naturally drawn to ICT;

"Everybody wants to work in Oil Company... but with ICT in agriculture, the use of technology will attract the young minds because all we see today are the old people in the rural area in agriculture, and everyone is running away from agriculture. But the infusion of technology will attract the youth" (The International Journal of Advanced Multidisciplinary Research and Review, 2015:38).

All of these effects and more are possible through the successful merging of IT and agriculture, which is why farmers are getting more and more encouraged to take part in this positive change. The youth must be made aware that technology, social media and agriculture are not mutually exclusive and can integrate seamlessly. Investments should also be made in improving access to technology and information for Africa's young people.

Databases of organisations that can provide the youth with information, skills and opportunities in agriculture should be developed and disseminated widely. Policymakers must encourage broad studies into why and how youths can engage fully and sustainably with agriculture (YPARD, 2010).

4.3.1.4. Policy framework

The past 23 years of democracy in South Africa has seen the piloting of policies to dismantle the legacy of apartheid. In order to attract young people to and engage them in agriculture, a multi-stakeholder process and analysis must be undertaken in which government, the donor community, NGOs and the private sector work together to ensure that the importance of agriculture is understood by the youth. These stakeholders should then have a policy framework that would include, but not be limited to, the following points (Rutta, 2012):

- “Enforce and promote agricultural based school programs from primary school to higher learning institutions. In Tanzania the government should re-introduce agriculture education into primary and secondary school syllabus, agriculture must be an exam subject in government and private managed schools to expose young people on agricultural education and build interest in agriculture among youth” (Rutta, 2012:7).
- The youth should be mobilised in farmer’s cooperatives in both rural and urban areas, from the district level to the village level, and youth agricultural projects must be promoted through technical and funding support.
- Providing business management and entrepreneurship training focusing on agricultural projects to young people in schools, with an emphasis on agribusiness as a self-employment opportunity for young people. This should be spearheaded by the already established white commercial farmers. Getting the black youth more involved in events such as the NAMPO Harvest Day would be a good start.
- The government should develop suitable land reform policies that will recognise the youth and allocate land for youth agricultural projects in urban and rural areas.
- The government, through its agencies and in collaboration with the private sector, should develop a suitable credit and finance facility for agricultural projects managed and run by young farmers, particularly those in rural areas.
- Successful youth agricultural groups should be promoted in and presented to the community as role models as a way to attract more youths to the agriculture sector.

- There should be improved access to markets for agricultural products and information on available opportunities in farming to enable the youth engaged in agriculture to access and capitalise on them.

The points above have been initiated to some extent; the issue is the success of these initiatives. There are various organisations across all sectors of the economy that are driving agriculture and youth policies in South Africa (Mathivha, 2012:33), as set out in Table 12 below.

Table 12. Key drivers of agriculture and youth policies in SA (Mathivha, 2012:33).

Organisation	Status	Policy focus
Department of Agriculture	Public institution	Agrarian reform, support and development
Department of Land Affairs	Public institution	Land reform, support and development
Department of Water Affairs	Public institution	Regulation and provision of water
National Youth Development Agency (NYDA)	Public youth development agency	Integrated youth development across all sectors, support, monitoring and evaluation
Agricultural Research Council	Public agency	Provision of scientific and technology products to the agricultural sector
Academic institutions	Public institutions	Training and development
Agricultural Business Chamber	Organised agricultural businesses	Agribusiness environment and economic growth
AgriSA	Private commercial farmers	Market development and economic growth

Commercial Agricultural Youth Chamber	Civil society	Lobbying and advocacy on social entrepreneurship and sustainable development
National African Farmers Union	Civil society	Economic transformation
Land Bank	State agency	Financial support and economic transformation
Commodity organisations, e.g. National Emergent Red Meat Producers Organisation (NERPO)	Commercial farmers	Lobbying and advocacy, enabling the agribusiness environment
Labour	Trade unions	Workers' rights

There needs to be more cohesiveness amongst these organisations in order for tangible results to be obtained regarding the youth and agriculture in South Africa. There also has to be depth in the exact role that each of these organisations (and others that could be included) can and should be playing, and a clear outline of the objectives that need to be achieved in a certain time period.

Continuing with Nigeria as a comparative, Ayinde, Aina, and Babarinde (2017) studied the effect of agricultural growth on unemployment and poverty in Nigeria. Through use of the Granger Causality approach and co-integration, Ayinde *et al.* (2017) found that development in the agricultural sector is a necessity and it is also known to lead the development of a country, like it did with Nigeria before the oil-boom era. Ayinde *et al.* (2017) recommended that government should part-take in programmes and formulate policies that will prioritize agriculture-this will result in poverty being kept at a minimum.

South Africa's National Youth Policy [NYP] for 2015 to 2020 was developed for all young people in South Africa in order to address the wrongs of the past and to address the specific challenges and immediate needs of the country's youth (NYP, 2015). "The NYP 2020 seeks to create an environment that enables the young people of South Africa to reach their potential. The policies, mindful of the global economic challenges that affect South Africa, identifies (sic) the mechanisms and interventions that will act as catalysts to help clear critical blockages and achieve this positive environment" (NYP, 2015). Regarding the

agricultural sector, the NYP 2020 stresses the fact that the youth need to have access to land and that the youth need to be trained in skills relevant to the agricultural sector.

4.4. Conclusion

As stated before, in South Africa there are an average of 15 571 vacant job opportunities in professional fields in agriculture each year. In spite of this, fewer than 3 000 students graduate each year to fill these positions. Skills shortages in South Africa are the consequence of the interplay of several complex socio-political and economic factors. Many see the education and training system of this country as the main contributor to the national skills crisis. The system is characterised by low education standards, inadequate provision for early childhood development, declining Grade 12 pass rates, declining enrolments at Further Education and Training (FET) colleges, lack of resources, underqualified teachers, weak management and poor teacher morale (Botha and Rasool, 2011:13). As depicted in this chapter, the black youth of South Africa are simply not aware of the employment potential that the agriculture and agribusiness sectors pose.

In order to ensure that the black youth overcome the current hindrances that they face regarding meaningful participation in the agricultural industry, a policy intervention involving three departments would need to be convened. This policy intervention would address the lack of awareness and the education problem (black youth not enrolling and/or not completing agriculture-related studies) that currently exists. The three departments would be the Department of Communications, the Department of Agriculture, Forestry and Fisheries, and the Department of Education (basic and higher education). A joint effort by these three government departments would go a long way to ensuring that the black youth are aware of the opportunities that exist in the agricultural sector, and subsequently participate in a meaningful manner that would ensure they earn a decent living and break the poverty cycle.

A concerted effort that will spread across various government departments and private establishments (private-public sector partnerships) will be imperative in this quest to change the perception of the agricultural sector amongst the youth, and to make the sector more fashionable and trendy. As mentioned before, the agricultural sector feeds into other sectors of the economy, and the sector is not being singled out as the only sector that can solve the problem of unemployment and poverty. Rather, more emphasis on the sector is needed because, at present, the sector and its potential are not being recognised.

The following chapter will focus on the quantitative part of this study and the empirical findings thereof.

Chapter 5: Empirical findings regarding the interest of the SA youth in agriculture

5.1. Introduction

The literature review gives a context to the research problem identified, and also imparts form to the research methods and methodologies which will be applied in solving the problem. This chapter delves into how the investigation was carried out in order to gain a greater understanding of the problem. Furthermore, the chapter considers the research methods and methodology, the design of the research, data collection tools and techniques used as well as the data analysis approach.

5.2. Research methodology

A research methodology is a systematic way to solve a problem. It is the science of studying how research is to be carried out. Fundamentally, it describes the procedures by which researchers go about their work of defining, explaining and predicting phenomena. It is also defined as the study of methods by which knowledge is gained. Its aim is to supply the work plan of a research effort (Fletcher, 2016).

5.2.1. Research methods

Leedy and Ormrod (2015) define research as a systematic process of collecting and analysing information (data) in order to increase our understanding of the phenomenon with which we are concerned or interested in. In general, the research methods inform the approach using which the researcher will structure the investigation to ensure the validity of the data, the research findings and the conclusions arising from those findings. This can be effected through the use of either qualitative or quantitative research techniques. Leedy and Ormrod (2015) make a distinction between the two, citing that qualitative studies exhibit two features, firstly; they focus on phenomena that occur in natural settings – that is, in the real world. While secondly, they involve capturing and studying the complexity of those phenomena; whereas quantitative research involves either identifying the characteristics of an observed phenomenon or exploring possible associations among two or more phenomena.

This dissertation utilises a mixed method known as triangulation¹⁶. It collects both qualitative and quantitative data, seeking for common themes that appear in the data gleaned from both

¹⁶ The term 'triangulation' originates in the field of navigation where a location is determined by using the angles from two known points. Triangulation in research is the use of more than one approach (qualitative and quantitative in this case) to researching a question. The objective is to increase confidence in the findings

methods. The researcher used a questionnaire for the purpose of gathering data from the youth of South Africa regarding their highest level of education obtained, their view of agriculture, where they reside within South Africa, and the general view of careers that the youth find attractive.

5.2.2. Research design

A research design provides a framework for undertaking the collection, analysis of data and presentation conclusions. A research design assists the researcher to plan and execute the research study in a manner that will help obtain the intended results, which could increase the chances of obtaining information that is somewhat reflective of the real situation. The research design for this study is a descriptive and interpretive case study that is analysed largely through qualitative methods with a small quantitative component.

through the confirmation of a proposition using two or more independent measures. The combination of findings from two or more rigorous approaches provides a more comprehensive picture of the results than either approach could do alone.

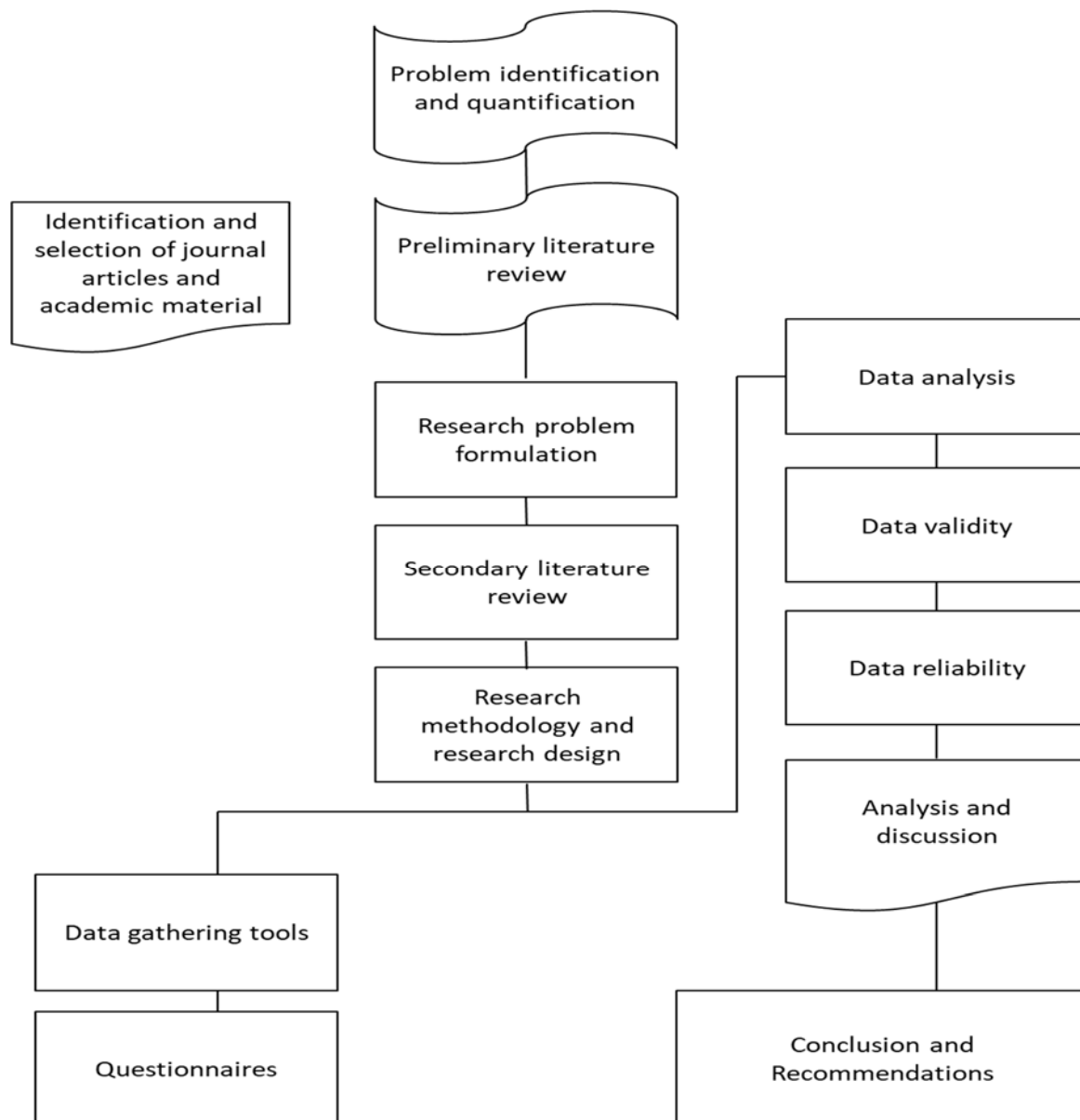


Figure 10. Research design structure (University of Southern California, 2019).

Before the study could be initiated, a problem had to be identified and quantified to evaluate whether it warranted a detailed research study. The researcher identified a gap and undertook a preliminary literature review to investigate the depth of the problem and the possible direction of the study. The said review was undertaken through identification and selection of relevant journal articles, scholarly books and other academic documents in the domain relevant to the research problem. The literature pointed towards a need to review government policies and various government departments in conjunction with the private sector needing to attend to this problem.

A secondary literature review was then undertaken to relate the research problem to what other authors have done in the same area of study. This was also carried out to ensure that

only relevant literature was used in the study. That found to be relevant was used to shape the methodology of the study.

When the research problem was clarified and studied through relevant literature, a research methodology was then formulated; subsequently a research design was devised.

During this phase data collection tools were identified and data analysis strategies were put in place. The data gathering process targeted individuals that are in their youth, across all races and gender. These findings were summarised, analysed and are respectively presented in the findings, conclusions and recommendations sections of this document.

5.2.3. Data collection strategy-questionnaire

Questionnaires or surveys are a quantitative technique of collecting data from a large number of respondents from the same or different geographical areas. Leedy and Ormrod (2015) are of the view that if questionnaires are to yield useful data, they must be carefully planned, constructed, and distributed. Questionnaires need to be simple enough for the respondent to understand; they have to be useable and functional.

A questionnaire directly aimed at capturing data from the youth of the three provinces (Eastern Cape, Western Cape, and Gauteng)¹⁷ was constructed. The contents of the questionnaire were based on the information and findings from the literature review. It addressed issues such as:

- Gender, age and race
- Level of education
- The view of the agricultural sector
- Which careers are most attractive

5.3. Analysis of the data obtained from the questionnaire¹⁸

To gain more insight on how the South African youth perceive the agricultural sector, a categorical questionnaire was compiled.¹⁹ There were 247 respondents across three provinces (Gauteng, Western Cape and Eastern Cape).

¹⁷ These three provinces were selected due to limitations and the author's proximity at the time of writing. These three provinces do however encompass the South African youth with Gauteng being the economic hub of the country and the Eastern Cape being one of the poorest provinces in the country.

¹⁸ The appendix contains detailed information about the survey.

¹⁹ Data can be classified as either categorical or quantitative. Data that can be grouped by specific categories are referred to as categorical data. Data that use numerical values to indicate how much or how many are referred to as quantitative data.

Throughout this paper we have looked at existing data and information regarding unemployment, poverty, inequality and the agricultural sector. This data and information have shaped the case that the agricultural sector does indeed have a pivotal role to play in alleviating poverty and creating employment for the youth of SA. However, it is important to have insight into how the youth perceive the sector, because if there is no alignment, positioning the sector to the youth of South Africa will be pointless if, for instance, they are not interested.

“Data can be obtained from existing sources or from surveys and experimental studies designed to collect new data” (Williams, Sweeney and Anderson, 2012:10). In this instance, an observational statistical study was conducted and information was obtained through a questionnaire that was given to a sample of individuals. The key demographics of the participants are illustrated below.

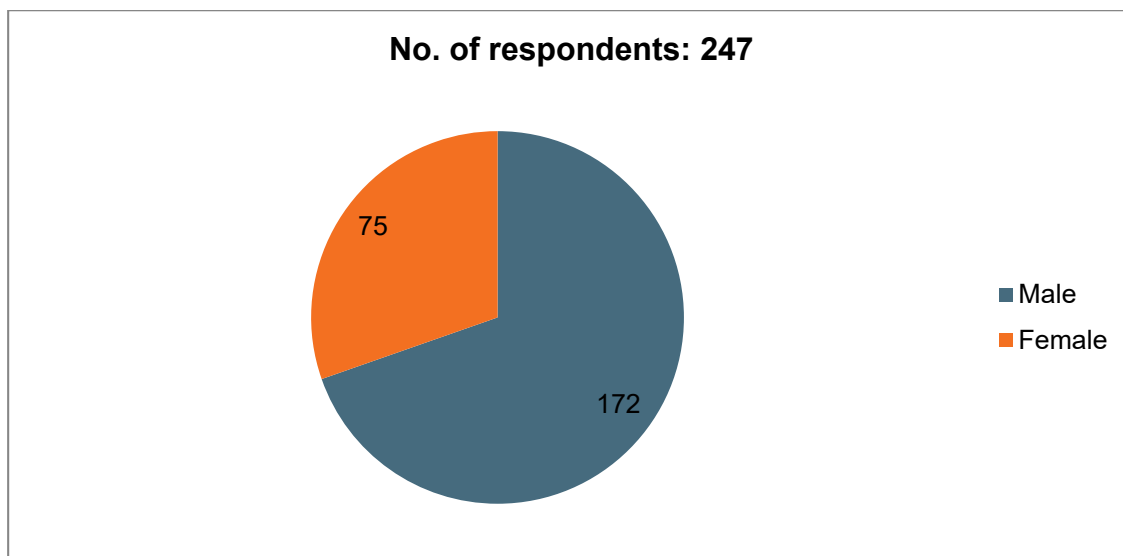


Figure 11. Data regarding the respondents' gender.

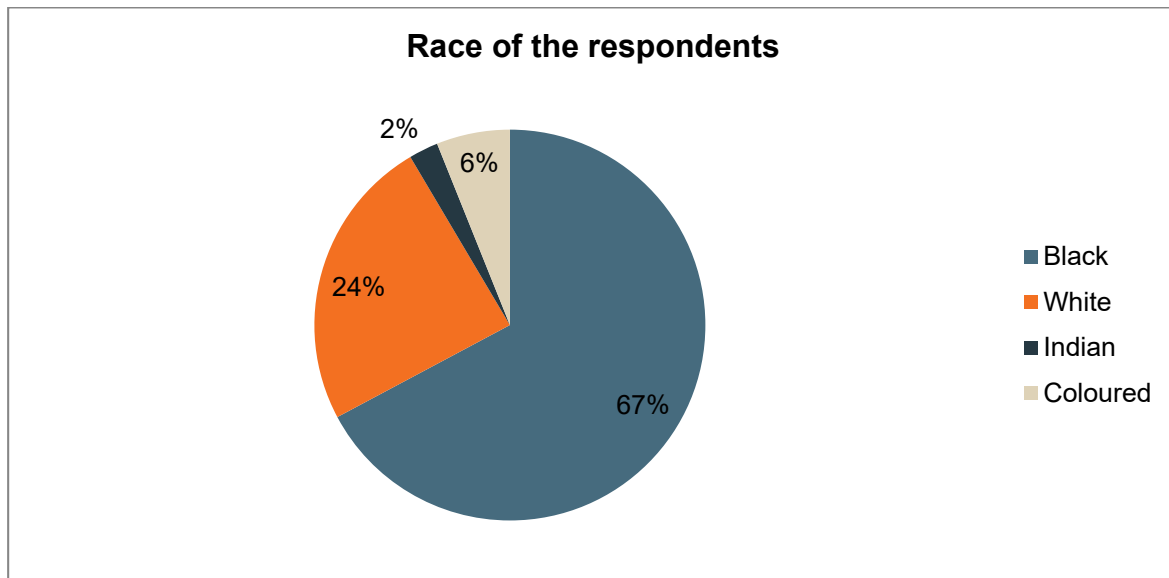


Figure 12: Data regarding the respondents' race.

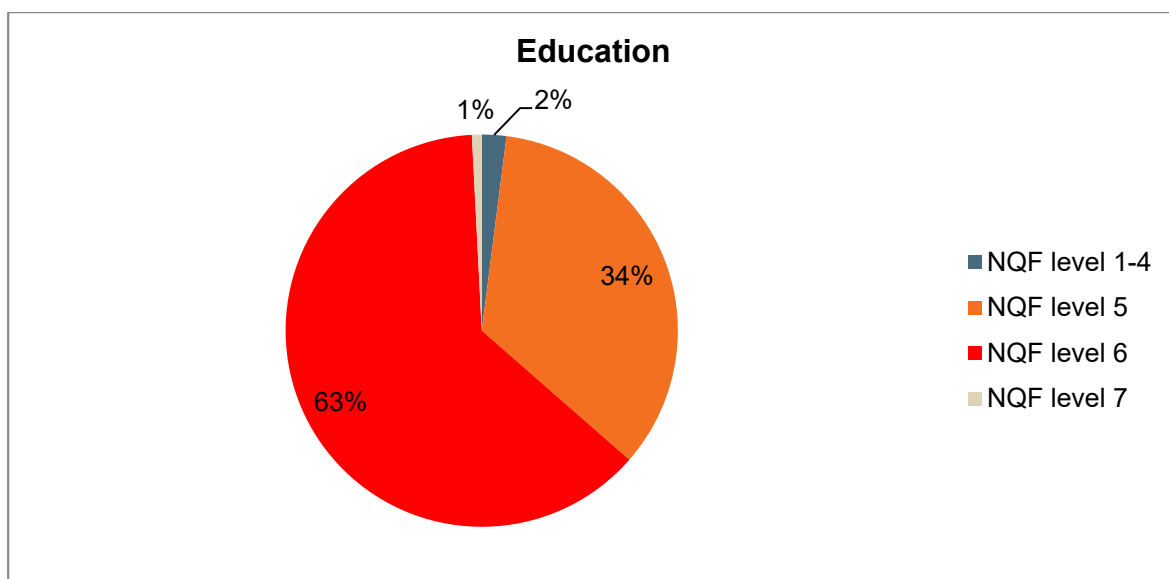


Figure 13. Data regarding the level of education of the respondents.

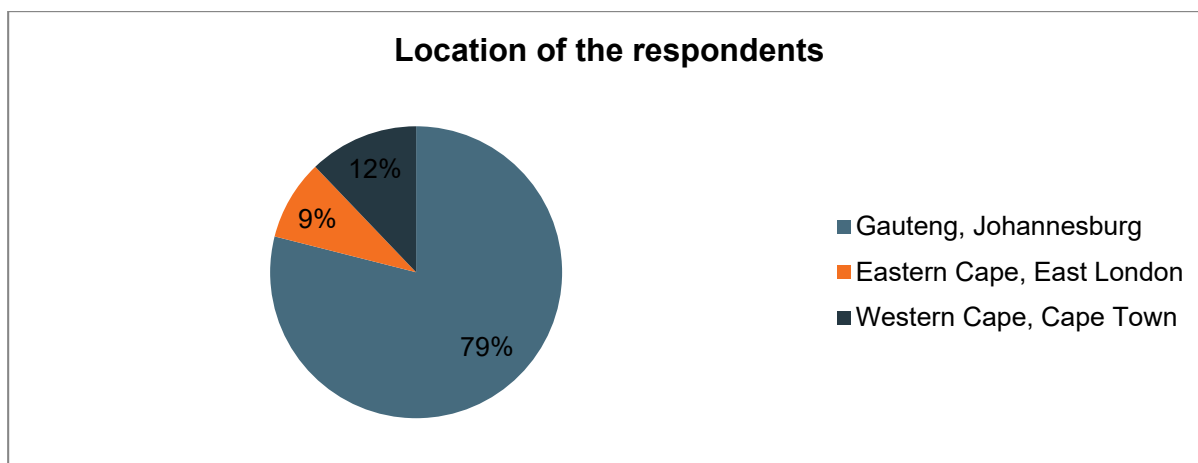


Figure 14. Data regarding the location of the respondents.

The figures above illustrate the demographics of the respondents who completed the questionnaire.²⁰ As can be seen, the majority of the respondents were black males from Gauteng province, with a National Qualifications Framework (NQF) of level 6.²¹ Appendix 1 provides the list of questions that were asked with the aim of obtaining a good idea of how the agricultural sector is perceived by the youth of South Africa. The key findings from this survey are provided in the table below.

Table 13: Key findings from the survey (please see appendix 1 for the questions).

	Findings
Question 1	As much as there are a number of agricultural colleges in the country, an overwhelming majority (99.6%) of the respondents said that agriculture was not offered as a subject at the high school they attended.
Question 2	Of the male respondents, 37.8% felt that there is no money in the agricultural sector, and thus indicated that they would not look at building a career in the sector. With the females the percentage was slightly higher, at 53%.

²⁰ The **limitation** in this regard is that, of the 247 respondents, only 109 completed the age section. The detailed information is in the annexure.

²¹ Level descriptors, as the terminology suggests, provide a description of each of the ten levels on the National Qualifications Framework (NQF). 1-4 = national certificates; 5 = higher certificates and foundation modules; 6 = diplomas and advanced certificates; 7 = bachelor's degrees and advanced diplomas; 8 = professional four-year bachelor's degrees and bachelor honours degrees; 9 = master's degrees; 10 = post-doctoral research degrees and doctorates (South African Qualifications Authority, 2016).

	<p>Regarding race, 90% of the black respondents said they would not pursue a career in the agricultural sector. It is also interesting to note that those who are still in high school (NQF 1 to 4) all said that they would not pursue a career in the sector.</p> <p>Regarding pursuing a career in the agricultural sector, it was white people who showed the most interest.</p>
Question 3	<p>A total of 52% of the 195 respondents from Gauteng province said that a career in the financial services sector was most attractive to them.</p> <p>Regarding the level of education, 45% of the respondents belonging to the level 6 category indicated that a career in financial services was most attractive to them.</p> <p>Regarding race, 66% of the Indian respondents said they would opt for a career in financial services.</p>
Question 4	<p>The majority of the respondents stated that the agricultural sector's contribution to South Africa's GDP was 4% to 8%. The correct answer is 0% to 3%, but when including agro-processing, which falls under manufacturing, the sector's contribution is in fact higher than 3%.</p>
Question 5	<p>The general consensus was that the majority of the respondents were aware of the linkages that exist between agriculture and the rest of the sectors of the economy.</p> <p>There seemed to be confusion regarding the link between agriculture and alcohol, with 57% of black people stating that there is no link between the two.</p>
Question 6	<p>From this sample, it is evident that the agricultural sector does not receive much coverage in all media platforms. Of the black respondents, 67% indicated that they only saw agriculture-related content on various media platforms when there is something happening, e.g. a drought. The remaining 33% said that they never see any agriculture-related content</p>

	on any media platform. Of the white respondents, 58% indicated that they never see any agriculture-related content on any media platform.
Question 7	<p>Ninety-one percent of males stated that they did not feel that agriculture has a pivotal role to play in the potential problem of feeding a rising population. Of the female respondents, however, 84% felt that the sector had an important role to play, with food security being cited as an imperative.</p> <p>A total of 87% of the black people felt that the sector did not have a vital role to play in the potential problem of feeding a rising population, while 92% of the white people were on the other side of the fence, stating that the sector does have an important role to play. Regarding location, 83% of the respondent sin Gauteng province felt that the sector did not have a pivotal role to play.</p>
Question 8	<p>The general consensus was that the respondents did not feel that the agricultural sector had a pivotal role to play in reducing poverty.</p> <p>Of the NQF level 5 holders, 38% felt that, since the sector does not pay well, it cannot have a positive impact in poverty reduction.</p>

The key findings from the survey reiterate the fact that the young black youth do not have an interest in agriculture and that they also are not aware of the potential of the sector. It may seem as though the government is doing very little regarding youth participation in the agricultural sector, although concerted efforts are being made. An example is the Junior LandCare Programme of the Department of Agriculture, Forestry and Fisheries, which is aimed at empowering the South African youth, particularly those in rural areas.

5.3. Conclusion

Given the results obtained from the survey (see Appendix 2), it is evident that there is a lot of work that needs to be done in order to align the agricultural sector with the black youth of South Africa. As much as the majority of the respondents seemed to be aware of the links

between the agricultural sector and other sectors of the economy, this does not hold much bearing when looking at positioning the sector so that it absorbs the youth, subsequently resulting in a decline in youth unemployment.

Another key factor is the presence of the sector in all media platforms and in schools. This definitely needs to be addressed if the sector is to gain any traction in attracting the youth.

The following chapter will conclude the study and point out areas of further research into this imperative topic of ensuring that more efforts are made in trying to alleviate poverty and unemployment.

Chapter 6: Conclusion

6.1. Introduction

Agriculture remains fundamental to poverty reduction and economic growth in the 21st century (World Bank, 2016b). The large population of youth in Africa should be seen as an asset for the continent's development if appropriate human capital investment measures are taken. Youth inclusivity in agriculture is thus an imperative because of its many direct and indirect benefits. In order to have a successful programme for youth and agriculture, there has to be efficient and effective co-ordination among the different stakeholders involved (banks, training centres, ministries, civil society, etc.) so that it is clear to the youth what the different procedures are for benefiting from a scheme/incentive, and where they should go at which stage.

Given the large population of youth in Africa, all African countries need to be more inclusive of the youth in policy formulation processes. There is a clear mismatch between skills supply and demand in South Africa, which is why there is high unemployment, especially amongst the black youth. Poverty in South Africa cannot be alleviated through government grants and other social initiatives (nor is this method sustainable); there has to be a paradigm shift towards self-sustainability amongst the people of South Africa, especially the youth. This will result in the economy performing better and inequality being reduced.

6.2. The importance of the agricultural sector in absorbing the unemployed youth of South Africa

It is evident that the agricultural sector has the potential to absorb many of the unemployed youth in South Africa, through formal employment and through self-employment within the sector. One of the main barrier towards achieving this is the perception of the youth about agriculture. The ripple effect of this perception is that the youth do not even consider pursuing agriculture-related studies, which perpetuates the skills match within the sector. As mentioned before, in South Africa there are an average of 15 571 vacant job opportunities in professional fields in agriculture each year. In spite of this, fewer than 3 000 students graduate each year to fill these positions (Kriel, 2015). Agriculture and the youth need to be placed at the centre of policy formulation and investment decisions.

“A clear message is needed that nations must feed themselves and ensure employment for their populations, including the youth. They are the future and they need to be part of agriculture. There is a need to invest in the youth's participation in agriculture, with more young people having access to resources, skills, land and capital for a decent livelihood in agriculture. With increasing costs of living and high unemployment there is a risk that

disenfranchised and disillusioned youths will take to the streets” (Afande, Maina, and Maina, 2015:16).

Given the present and anticipated future role of agriculture in employment, and the sheer number of youth in rural areas today and the numbers anticipated in the future, new models to enhance decent employment and livelihoods in the agriculture sector must be developed, including support for employment opportunities along the entire agri-food market chain and the associated service sectors. These models will require supportive policy and new investments, including public-private sector partnerships. The voices of farmers, including small-scale farmers, of rural youth and of the private sector must remain central to any dialogue and policy process (Afande *et al.*, 2012:16).

Youths in agriculture usually have the feeling that they do not have any support/guidance and become demotivated. The introduction of mentorship programmes to guide youths in the sector is imperative. It is clear that sustainable youth engagement with agriculture will give rise to positive results that are not limited to food security. It will also have positive impacts on unemployment, economic development, rural-urban migration, peace and national security for African countries.

“To harness these potentials, stakeholders must think beyond conceiving youths as units of labour to be placed in jobs. Effective empowerment and engagement of young people in agriculture requires the ability of the sector to address youths ‘aspirations, expectations and desire for social mobility. Agriculture needs to be ‘decent work’ and address broader conceptions of human well-being. The image of agriculture as dirty, laborious work at low skill levels for little returns must be changed” (Afande *et al.*, 2015:17).

It is evident that this required shift in the minds of the youth will not happen overnight and in the interim poverty and unemployment remain prevalent amongst the black youth. It must be stated that there are indeed many youths succeeding in agriculture-across the entire value chain. In the short-term, more needs to be done regarding showcasing these success stories across all media platforms, for the youth but more importantly key stakeholders (e.g. development finance institutions, banks, agribusinesses, etc.) in the agricultural sector to take notice and play their part empowering the youth that is keen to get involved in agriculture. From an educational point, in the short term, more attention needs to be given to the existing agricultural colleges and private-public partnerships are needed to promote these colleges on the same level that technical and vocational education and training (TVET) colleges are being promoted to high scholars. The department of agriculture and the department of education (basic and higher) need to sit down with institutions like the Agricultural Business Chamber in order to craft a strategy that will ensure that agri

businesses play their part in ensuring that the youth is made aware of all of the careers within the sector and that there is exposure (e.g. trips to barley producing farms and thereafter a trip to a brewery) whilst scholars are still in primary and high school.

In the medium to long term, the department of agriculture and education (basic and higher) need to invest in including agriculture in the syllabus of all public and private schools and not just the few dedicated agricultural schools in the country. Adequate infrastructure development is key for the economy at large, and for the agricultural sector it would ensure that among others, issues like access to markets and adequate water supply as an input are addressed.

6.3. Further research

There have been many studies on the agricultural sector and its impact on poverty alleviation and unemployment; many of these papers have been cited throughout this one. The role that the agricultural sector has to play regarding youth unemployment has also been looked at previously, and those papers have also been cited throughout this paper. The negative perception that the youth have regarding the agricultural sector is also a fact that is known within and outside of the sector.

Going forward, increasing the sample size of the questionnaire would be very helpful, and it would be interesting to see what changes with regard to the different categories used. Ensuring that the respondents' ages are accurate will also be key. The suggestions made regarding attracting the youth to the agricultural sector, could be researched further (the practicality of implementing the suggestions) and subsequently implemented by the parties concerned (public-private partnerships).

List of references

- Afande, F., Maina, W., and Maina, M. 2015. *Youth engagement in agriculture in Kenya: Challenges and prospects*. Journal of Culture, Society, and Development, Vol. 7, pp. 4-19.
- African Development Bank. 2016. *African Economic Outlook 2016*. African Development Bank Group.
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2016_Report_Full_English.pdf [Accessed: 20 May 2018].
- African Economic Outlook. 2017. *Entrepreneurship and Industrialisation*. African Development Bank Group.
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2017_Report_Full_English.pdf [Accessed: 22 May 2018].
- African Monitor. 2012. *Rural infrastructure in Africa: Unlocking the African moment*. Development Support Monitor - Paper series No. 1. <http://www.africanmonitor.org/wp-content/uploads/2017/04/Rural-Infrastructure-In-Africa.pdf> [Accessed: 12 June 2017].
- Anand, R., Kothari, S., and Kumar, N. 2016. *South Africa: Labour market dynamics and inequality*. International Monetary Fund Working Paper no. 16/137.
- Anisimova, E. 2016. *Public expenditure in agriculture: Trends, “black boxes”, and more*. International Food Policy Research Institute (IFPRI). <http://www.ifpri.org/blog/public-expenditure-agriculture-trends-%E2%80%99Cblack-boxes%E2%80%9D-and-more> [Accessed: 1 May 2017].
- Anríquez, G., and Stamoulis, K. 2007. *Rural development and poverty reduction: Is agriculture still the key?* ESA working paper 07/02. Agricultural Development and Economics Division, Food and Agriculture Organization of the United Nations.
- Area Gist. 2016. *MTN Nigeria launches cattle tracker*. <http://areagist.com/mtn-nigeria-launches-cattle-tracker/> [Accessed: 31 July 2017].
- Ayinde, O.E., Aina, I.V., and Babarinde, S.O. 2017. *Effect of agricultural growth on unemployment and poverty in Nigeria (1980-2012): A co-integration approach*. Department of Agricultural Economics and Farm Management, University of Ilorin, Nigeria.

Badiane, O., and Makombe, T. 2014. *The theory and practice of agriculture, growth, and development in Africa*. WIDER Working Paper 2014/061. World Institute for Development Economics Research.

Bernard, T., and Taffesse, A.S. 2012. *Measuring Aspirations: Discussion and Example from Ethiopia*. International Food Policy Research Institute (IFPRI) Discussion Paper 01190. Washington, DC: International Food Policy Research Institute.

Bhorat H., and Van der Westhuizen, C. 2012. *Poverty, inequality and the nature of economic growth in South Africa*. Development Policy Research Unit. Working paper 12/151. University of Cape Town.

BMI Research. 2018. *Economic growth outlook-South Africa Q2 2018*. https://bmo.bmiresearch.com/article/view?article=1331468&advanced_search=1&matches=7800&page=1&position=1&keyword=south%20africa%20economy%20 [Accessed: 16 February 2018].

Botha, C., and Rasool, F. 2011. *The nature, extent and effect of skills shortages on skills migration in South Africa*. Potchefstroom Business School, North West University, Potchefstroom 2520, South Africa.

Bureau for Food and Agricultural Policy (BFAP). 2017. *BFAP Baseline Agricultural Outlook 2017-2026: Managing agriculture's footprint in an uncertain environment*. 53 Lunnon Rd, Hillcrest, Pretoria, 0083.

Cervantes-Godoy, D., and Dewbre, J. 2010. *Economic Importance of Agriculture for Poverty Reduction*. OECD Food Agriculture and Fisheries. Working paper no. 23. France.

Deloitte, 2014. *Ethiopia: A growth miracle*. Available at: https://www2.deloitte.com/content/dam/Deloitte/za/Documents/strategy/za_ethiopia_growth_miracle_july2014.pdf [Accessed: 26 May 2017].

Department of Agriculture, Forestry and Fisheries. 2013. *Estimating the impact of minimum wages on employment, wages and non-wage benefits: The case of Agriculture in South Africa*. Pretoria: DAFF.

Department of Justice and Constitutional Development. 2018. *Acts/Statutes administered by the department*. Available at: http://www.justice.gov.za/legislation/acts/acts_full.html [Accessed: 1 October 2018].

Department of Labour. 2013. *Farm worker minimum wage set at R105 per day – Mildred Oliphant*. <http://www.labour.gov.za/DOL/downloads/legislation/sectoral-determinations/basic-conditions-of-employment/2016farmsectorwages.pdf> [Accessed: 3 March 2017].

Department of Labour. 2016. *Minimum wages for employees in the farm worker sector*. <http://www.labour.gov.za/DOL/downloads/legislation/sectoral-determinations/basic-conditions-of-employment/2016farmsectorwages.pdf> [Accessed: 30 March 2016].

Du Toit, C., and Van Tonder, J. 2009. *South Africa's economic performance: can we do better?* In, Zumanomics, R. Parsons, (ed.) Auckland Park: Jacana.

De Waal, A., and Van Eyden, R. 2013. *The Impact of Economic Shocks in the Rest of the World on South Africa: Evidence from a Global VAR*. University of Pretoria Working Paper 2013-28.

Diao, X., Hazell, P., and Thurlow, J. 2010. The Role of Agriculture in African Development. *World Development Report*, volume 38, pp. 1375-1383.

eNCA. 2016. *Thousands expected at DA jobs march*. <https://www.enca.com/south-africa/thousands-expected-da-jobs-march> [Accessed: 10 February 2016].

Facebook. 2016. *Living Land*. https://www.facebook.com/pg/Official.LivingLand/about/?ref=page_internal [Accessed: 13 October 2016].

Fletcher, A. 2016. *Applying critical realism in qualitative research: methodology meets method*. *International Journal of Social Research Methodology*, volume 20, issue 2, pp181-194.

Food and Agriculture Organization. 2016a. <http://www.fao.org/home/en/> [Accessed: 18 May 2016].

Food and Agriculture Organization. 2016b. http://www.fao.org/documents/card/en/c/918e165d-4d8d-4e92-be1c-6d026b57939f/?utm_content=buffera8f4c&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer [Accessed: 7 March 2017].

Fosu, A. 2016. *Growth, inequality, and poverty reduction in developing countries: Recent global evidence*. *Research in Economics*, volume 71 (2017), pp. 306-336.

Ghazi, B., and Jihene, S. 2013. *The causality between income inequality and economic growth: empirical evidence from the Middle East and North Africa Region*. Asian Economic and Financial Review, volume 3 (5), pp. 668-682.

Global Economic Prospects. World Bank. 2017.

<http://www.worldbank.org/en/publication/global-economic-prospects> [Accessed: 11 January 2019].

Goyal, A., and Nash, J. 2017. *Reaping Richer Returns: public spending priorities for African agriculture productivity growth*. International Bank for Reconstruction and Development. 1818 H Street NW, Washington, DC 20433.

Greyling, J. C. 2012. *The role of the agricultural sector in the South African economy*. MScAgric thesis, Stellenbosch University.

Hazell, B.R. 2009. *The Asian Green Revolution*. International Food Policy Research Institute (IFPRI). 1201 Eye Street, NW, Washington, DC 20005-3915 USA.

Hirschl, T., and Rank, M. 2015. *The Likelihood of Experiencing Relative Poverty over the Life Course*. George Warren Brown School of Social Work, Washington University, St. Louis, Missouri, United States of America.

Human Sciences Research Council. 2014. *Income inequality and limitations of the Gini index: The case of South Africa*. <http://www.hsrc.ac.za/en/review/hsrc-review-november-2014/limitations-of-gini-index> [Accessed: 15 August 2016].

Hnatkovska, V. and Lahiri, A. 2013. *Structural transformation and the rural-urban divide*. http://faculty.arts.ubc.ca/alahiri/Rural_v32.pdf [Accessed: 13 October 2018].

IBM. 2016. *Precision Agriculture*.

http://researchweb.watson.ibm.com/articles/precision_agriculture.shtml [Accessed: 9 July 2017].

International Fund for Agricultural Development (IFAD). 2016. *Rural Development Report 2016 Fostering inclusive rural transformation*.

<https://www.ifad.org/documents/10180/4bcb3209-0773-489a-b93a-57fae6581b69> [Accessed: 15 June 2017].

International Journal of Advanced Multidisciplinary Research and Review. 2015. *Application of ICT to agriculture as a panacea to unemployment in Nigeria*. Available online at:

<http://mpira.ub.uni-muenchen.de/61394/> MPRA Paper No. 61394, posted 19. January 2015 21:19 UTC.

International Labour Organization. 2017. *Global employment trends for youth 2017*.

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_598669.pdf [Accessed: 8 January 2018].

International Monetary Fund. 2016a. *World Economic Outlook*.

<http://www.imf.org/external/pubs/ft/weo/2016/update/01/index.htm> [Accessed: 12 February 2016].

International Monetary Fund. 2016b. *South Africa and the IMF*.

<http://www.imf.org/external/country/ZAF/index.htm> [Accessed: 12 February 2016].

Jacobs, P. (2009). *Agricultural market reforms and the rural poor in South Africa*. Research paper presented at a PLAAS Poverty Workshop.

Jarociński, M. and Maćkowiak, B. (2013) : *Granger-causal-priority and choice of variables in vector auto-regressions*, ECB Working Paper, No. 1600, European Central Bank (ECB), Frankfurt a. M.

Jayaram, K., Riese, and Sanghvi, S. 2010. *Agriculture: Abundant opportunities*. McKinsey Quarterly. McKinsey and Company, New York City.

Johnson, G. 1997. Agriculture and the Wealth of Nations. *The American Economic Review*, vol. 87, no. 2, pp. 1-12.

Karaan, M. 2015. *Transforming agriculture: Where is the magic?* Farmer's Weekly, vol. 15021, pp. 6-7.

Keeton, G. 2014. *Inequality in South Africa*. The Journal of the Helen Suzman Foundation, vol. 74, pp. 26-31.

Kenya Climate Innovation Centre. 2016. <https://www.kenyacic.org/> [Accessed: 31 July 2017].

Klasen, S. and Reimers, M. 2016. *Looking at pro-poor growth from an agricultural perspective*. Courant Research Centre: poverty, equity, and growth in developing and transition countries: statistical methods and empirical analysis, no. 201. Georg-August-Universität Göttingen.

Kriel, G. 2015. *More graduates needed for SA's agricultural sector*. Farmer's Weekly, vol. 15021, p. 23.

Kuznets, S. 1955. *Economic Growth and Income Inequality*. American Economic Review vol. 45, issue 1, pp. 1-28.

Leedy, P.D, and Ormrod, J.E. 2015. *Practical Research: Planning and Design Eleventh Edition*. Pearson Education Limited, Edinburgh Gate, Harlow, England.

Lilenstein, K., Woolard, I., and Leibbrandt, M. (2016). *In-Work Poverty in South Africa: The Impact of Income Sharing in the Presence of High Unemployment*. A Southern Africa Labour and Development Research Unit Working Paper Number 193. Cape Town: SALDRU, University of Cape Town.

Lundahl, M. 1983. *The primary sector in economic development*. Proceedings of the Seventh Arne Ryde Symposium, August 29-30. Frostavallen, Sweden.

Machethe, C. 2004. *Agriculture and poverty in South Africa: can agriculture reduce poverty?* Paper presented at the Overcoming Underdevelopment Conference held in Pretoria, 28-29 October.

Mahadea, D., and Simson, R. 2010. *The challenge of low employment economic growth in South Africa: 1994-2008*. South African Journal of Economic and Management Sciences, vol. 13, no. 4.

Mail & Guardian. 2015. *Checked: 80% of South African schools indeed 'dysfunctional'*. <http://mg.co.za/article/2015-03-25-are-80-of-south-african-schools-dysfunctional> [Accessed: 12 August 2016].

Marsh, R. 2015. *Determinants of income inequality in the early twenty-first century: A cross-national study*. Comparative Sociology, vol. 14, issue 2, pp. 219-251.

Mathivha, O. 2012. *Current and emerging youth policies and initiatives with a special focus on links to agriculture: South Africa case study draft report*. Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN). Pretoria, South Africa.

McGranahan, G., and Satterthwaite, D. 2014. *Urbanisation concepts and trends*. International Institute for Environment and Development (IIED) Human Settlements Group Working Paper, June 2014.

McKinsey and Company. 2016. *How companies are using big data and analytics*. <http://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/how-companies-are-using-big-data-and-analytics> [Accessed: 13 July 2016].

McLaren, Z., Ardington, C., and Leibbrandt, M. 2014. *Distance decay and persistent health care disparities in South Africa*. BMC Health Services Research. Vol. 14, issue 541.

<https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-014-0541-1>

[Accessed: 1 May 2017].

Mellor, J. W. 1999. *The relation between growth in agriculture and poverty reduction*. United States Agency for International Development.

Mellor, J. 2015. *How does the extraordinary growth rate in Ethiopian agriculture inform our understanding of economic development?* Presentation as part of CIIFAD's "Perspectives in International Development" Fall Seminar Series, September 30. Available at

http://videonotevideos.s3.amazonaws.com/downloads/CIIFAD-John_Mellor-Ethiopian_Agriculture_Growth_rates_9-30-2015.mp4 [Accessed: 13 May 2017].

National Agricultural Marketing Council. 2009. *The functioning of the agricultural futures market for grains and oilseeds in the light of concerns expressed by Grain South Africa*.

Pretoria: NAMC.

National Planning Commission. 2011. *National Development Plan: Vision for 2030*. Pretoria, South Africa.

National Treasury. 2007. *The measurement of poverty in South Africa Project: Key issues*.

<http://www.treasury.gov.za/publications/other/povertyline/SP11%20document.pdf> [Accessed: 22 May 2017].

National Treasury. 2017. Budget Review 2017.

<http://www.treasury.gov.za/documents/national%20budget/2017/review/FullBR.pdf>

[Accessed: 12 April 2017].

National Youth Development Agency. 2016. <http://www.nyda.gov.za/Pages/default.aspx>

[Accessed: 22 November 2016].

National Youth Policy. 2015. *2015-2020 We are generation 2020. We don't want a hand-out we want a hand up!*

[file:///C:/Users/mmama/Downloads/NYP%20Policy%202020%20Report%20\(1\).pdf](file:///C:/Users/mmama/Downloads/NYP%20Policy%202020%20Report%20(1).pdf)

[Accessed: 9 July 2017].

Netshitenzhe, J. 2013. *Why inequality matters: South African trends and interventions*.

Mapungubwe Institute for Strategic Reflection.

<http://www.mistra.org.za/Library/ConferencePaper/Documents/Why%20Inequality%20Matters-South%20African%20Trends%20and%20Interventions.pdf> [Accessed: 2 October 2018].

Neves, D., and Du Toit, A. 2013. Rural livelihoods in South Africa: complexity, vulnerability, and differentiation. *Journal of Agrarian Change*, vol. 13 no 1, pp. 93-115.

Nyoni, T. 2012. *Current and emerging youth policies and initiatives with a special focus on link to agriculture: Zimbabwe case study draft report*. Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN). Pretoria, South Africa.

Oduola, A. 2017. Fiscal space, poverty, and inequality in Africa. *African Development Review*, vol. 29, no. 1, S1, 2017, 1-14. [Accessed: 3 May 2019].

Oluwajodu, F., Blaauw, D., Greyling, L., and Kleynhans E. 2015. *Graduate unemployment in South Africa: perspectives from the banking sector*. SA journal of Human Resource Management, vol. 13 no 656, pp 1-9.

Organisation for Economic Co-operation and Development (OECD). 2014. Brazil statistics. <http://www.oecd.org/brazil/growth-is-not-enough.htm> [Accessed: 19 November 2015].

Organisation for Economic Co-operation and Development (OECD). 2016. South Africa statistics. <https://www.oecd.org/economy/south-africa-economic-forecast-summary.htm> [Accessed: 22 November 2016].

Oxford Learner Dictionary. 2019. Definition of media. https://www.oxfordlearnersdictionaries.com/definition/american_english/media [Accessed: 5 April 2019].

Quantec. 2018. *GDP by industry: GDP at market prices (Constant 2010 prices: Seasonally adjusted (Annualized percentage change)) [Quarterly average, year on year % change]*. <http://www.easydata.co.za/data/timeseries/SSA-C00222-AAY/> [Accessed: 20 April 2018].

Ravallion, M., and Datt, G. 1996. How important to India's poor is the sectoral composition of economic growth? *World Bank Economic Review* Vol. 10, No. 1, pp. 1-10.

Ravallion, M., and Datt, G. 2002. Why has economic growth been more pro-poor in some states of India than others? *Journal of Development Economics* Vol. 68, pp. 381-400.

Rutta, E. 2012. *Current and emerging youth policies and initiatives with a special focus and links to agriculture*. FANRPAN. 141 Cresswell Street, Weavind Park 0184 Private Bag X2087, Silverton 0127 Pretoria, South Africa.

Herry, S. 2013 (October 4). *Black farmers aim to block Afgri takeover*. *Business Day*. <https://www.businesslive.co.za/bd/companies/land-and-agriculture/2013-10-04-black-farmers-aim-to-block-afgri-takeover/> [Accessed: 14 June 2016].

Schools 4 SA. 2016. *Browse South African schools by specialization*.

<http://www.schools4sa.co.za/specialisation/> [Accessed: 23 July 2015].

Schunemann, J., and Aucoin, C. 2016. *Africa's future is urban*. Institute for Security Studies.

<https://issafrica.org/iss-today/africas-future-is-urban> [Accessed: 12 April 2017].

Shay, S. 2016. *Educational investment towards the ideal future: South Africa's strategic choices*. South African Journal of Science 2017; 113(1/2), Article number 2016-0227, 6 pages. <https://dx.doi.org/10.17159/sajs.2017/20160227> [Accessed: 22 April 2019].

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*, vol. 3 of the modern library of the world's best books.

South African Institute of Tax Professionals (SAIT). 2016. *Understanding the Tax Implications of the Youth Wage Subsidy*.

<http://www.thesait.org.za/news/292285/Understanding-the-Tax-Implications-of-the-Youth-Wage-Subsidy.htm> [Accessed: 12 April 2017].

South African Qualifications Authority. 2016. *The South African National Qualifications Framework*. SAQA House, 1067 Arcadia Street, Hatfield, Pretoria, 0028, South Africa.

Southern African Regional Poverty Network. 2013. *The causes of poverty and addressing the challenges*.

http://www.sarpn.org/CountryPovertyPapers/SouthAfrica/taylor/report4_section3.pdf

[Accessed: 27 August 2016].

South African Reserve Bank. 2008. *Quarterly Bulletin*.

<https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/4064/Full%20Quarterly%20Bulletin.pdf> [Accessed: 22 October 2018].

Statistics South Africa. 2008. *Gross domestic product annual estimates per region: 1995-2007*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2010. *Estimate of the contribution of the agriculture sector to employment in the South African economy*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2014a. *National and provincial labour market: Youth*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2014b. *Poverty trends in SA; An examination of absolute poverty between 2006 and 2011*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2015. *National and provincial labour market: youth*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2016. *Quarterly Labour Force Survey: Quarter 3, 2016*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2017. *Gross domestic product: fourth quarter 2016*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2018. *Quarterly Labour Force Survey: Quarter 4, 2018*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Statistics South Africa. 2018. *Men, Women, and Children; findings of the living conditions survey, 2014/15*. De Bruyn Park Building, 170 Thabo Sehume Street, Pretoria, 0002 Private Bag X44, Pretoria, 0001, South Africa.

Stellenbosch University. 2016. *AgriSciences*.
<http://www.sun.ac.za/english/faculty/agri/departments1> [Accessed: 18 May 2017].

Steyn, L. 2015. *Analysts split over wage subsidy*. <https://mq.co.za/article/2015-11-27-00-analysts-split-over-wage-subsidy> [Accessed: 12 April 2017].

Streak, J. 2004. *The Gear legacy: did Gear fail or move South Africa forward in development?* Development Southern Africa, vol. 21 (2), June 2004. Taylor and Francis Group.

Study.com. 2016. *Retail buyer career information, job description and duties*.
http://study.com/retail_buyer_career.html [Accessed: 22 May 2017].

The Presidency of the Republic of South Africa. 2015. *National Youth Policy 2015-2020*. Union Buildings Private Bag X1000, Pretoria, 0001.

Trading Economics. 2017. *Unemployment rate*. <https://tradingeconomics.com/country-list/unemployment-rate> [Accessed: 12 April 2017].

Trading Economics. 2018. Unemployment rate. <https://tradingeconomics.com/country-list/youth-unemployment-rate> [Accessed: 8 January 2018].

Tseng, D. 2013. *State transfers, poverty and inequality of income in South Africa: a fifteen year review*.

https://econrsa.org/system/files/workshops/papers/2013/ersa_fifteen_year_review_-_david.pdf [Accessed: 22 March 2017].

Turok, I. 2012. *Urbanisation and Development in South Africa: Economic Imperatives, Spatial Distortions and Strategic Responses*. Urbanisation and emerging population issues working paper 8. London: International Institute for Environment and Development (IIED).

United Nations. 2015. *Millennium Development Goals*.

<http://www.un.org/millenniumgoals/bkgd.shtml> [Accessed: 20 February 2016].

United Nations. 2015. *Sustainable Development Goals*.

<https://www.un.org/development/desa/disabilities/envision2030.html> [Accessed: 15 June 2018].

United Nations Children's Fund (UNICEF). 2012. *The state of the world's children 2012*. New York: United Nations.

Van der Berg, S. 2010. *Current poverty and income distribution in the context of South African history*. Stellenbosch Economic Working Papers 22/10.

University of Southern California. 2019. Types of Research Designs.

<https://libguides.usc.edu/writingguide/researchdesigns> [Accessed: 12 June 2019].

Vodacom. 2017. Connecting farmers for a better future.

<http://now.vodacom.co.za/article/2017/02/08/connecting-farmers-for-a-better-future>

[Accessed: 31 July 2017].

White, B. 2012. *Agriculture and the Generation Problem: Rural Youth, Employment and the Future of Farming*. Institute of Development Studies. Oxford, United Kingdom.

Williams, T., Sweeney, D., and Anderson, D. 2012. *Contemporary Business Statistics* (fourth edition). South-Western Cengage Learning.

World Bank (2008). *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Commission on Growth and Development. The International Bank for Reconstruction and Development.

World Bank, 2016a. *Agriculture, value added: Ethiopia*.

<http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=ET> [Accessed: 15 April 2017].

World Bank. 2016b. Country dashboard: Morocco.

<http://povertydata.worldbank.org/poverty/country/MAR> [Accessed: 14 June 2017].

World Bank. 2018. *Inclusive growth: a synthesis of findings from recent IEG evaluations*.

[http://ieg.worldbankgroup.org/sites/default/files/Data/Evaluation/files/Inclusive Growth Synt hesis.pdf](http://ieg.worldbankgroup.org/sites/default/files/Data/Evaluation/files/Inclusive_Growth_Synthesis.pdf) [Accessed: 20 July 2018].

Young Professionals' Platform for Agricultural Research for Development (YPARD). 2010.

Engaging youth in agriculture – investing in our future.

[http://www.fanrpan.org/documents/d01510/commentary_engaging_youth_in_agriculture investing_in_our_future.pdf](http://www.fanrpan.org/documents/d01510/commentary_engaging_youth_in_agriculture_investing_in_our_future.pdf) [Accessed: 4 June 2015].

Appendix 1: Questionnaire

NB: Please put a tick next to your chosen answer(s) where applicable.

Gender: ☐ Male ☐ Female

Race: ☐ Black ☐ White ☐ Coloured ☐ Indian

Age: ☐ 14-18 ☐ 19-25 ☐ 26-34

Education – **highest level obtained** (please see footnote **at the bottom of the page** for clarity on the National Qualifications Framework (NQF)²² :

☐ General education and training (NQF level 1-4)

☐ Further education and training (NQF level 5)

☐ Higher education and training (NQF level 6-10)

Which province do you currently reside in and which city within that province (e.g. Gauteng, Pretoria)?

- 1) Was/is agriculture (or any agriculture-related subjects, e.g. agronomy) offered as a subject at your high school? ☐ Yes ☐ No

If you answered yes, please state the name of the subject/course:

- 2) Would you consider a career (as an employer, an employee, or a consultant) in the agricultural sector? **Please circle the letter of the option that you agree with, e.g. circle “A” if you agree with the statement.**
- A) No, I want to make money and there’s no money in farming.
- B) No, I am not interested in farming and farm life in general is boring, I would not want to be stuck on a farm.
- C) What else can you do in the sector besides being a farmer or a farm worker?
- D) Yes as I would like to eventually open up my own consultancy firm to provide farm management expertise to farmers.
- E) Yes I would. The fact that the value chain of the industry is so detailed intrigues me and I could participate at various stages of the agricultural value chain, depending on my interests.
- F) A&B

²² Level descriptors, as the terminology suggests, provide a description of each of the ten levels of the National Qualifications Framework (NQF). **1-4** = national certificates; **5** = higher certificates and foundation modules; **6** = diplomas, advanced certificates; **7** = bachelor’s degree and advanced diplomas; **8** = professional 4-year bachelor’s degrees and bachelor honours degrees; **9** = master’s degrees; **10** = post-doctoral research degrees and doctorates.

3) Which **one** of the following careers is most attractive to you? **Please circle the letter of the option that you agree with, e.g. circle “A” if you agree with that option.**

- A) Financial services (Chartered accountant, Chartered financial analyst, trader etc.)
- B) Medicine
- C) Agronomy
- D) Farming (farm owner or manager)
- E) Law
- F) Agricultural economics
- G) Engineering (mechanical, electric, etc.)
- H) Construction/quantity surveying
- I) Information technology/information systems
- J) Other

4) Regarding South Africa’s gross domestic product (GDP), how much do you think the agricultural sector contributes to the GDP?

☐ 0-3%

☐ 4-8%

☒ 9-20%

5) Which one of the following entities do you feel is directly dependent on the existence of the agricultural sector (farming, agro-processing etc.)? **Please indicate with a tick if you feel that there is direct dependence, and a cross (X) if you think that industry would exist without agriculture:**

- A) KFC
- B) Vodacom
- C) The Land Bank
- D) Tiger Brands
- E) Edgars
- F) Spur
- G) Absa bank
- H) Post Office
- I) Pam Golding Properties
- J) Shoprite
- K) Ultra Liquor Stores

6) How often do you see agriculture-related content on the various media platforms (social media, radio, TV, etc.)? **Please circle the letter of the option that you agree with, e.g. circle “A” if you agree with that option.**

- A) All the time, there are farming-related programmes on all of the SABC channels.
- B) Only when there is something going that directly affects the sector, e.g. a drought.
- C) I never see anything that is agriculture-related on any media platform.
- D) I sometimes see agriculture-related content on newspapers, social media platforms, and I sometimes see TV programmes covering the sector.
-
- 7) Given the rising global population, do you feel that the agricultural sector has **one of the most vital roles** to play in this regard?
- A) No, I don't see how rising global population is linked to agriculture.
- B) Yes, people need to eat and food security is already a problem in many countries.
- C) Yes, agriculture does have a role to play but I don't think it is an important one.
- 8) Do you think that the agricultural sector has a pivotal role to play in reducing poverty in poverty-stricken countries? **Please circle the letter of the option that you agree with, e.g. circle "A" if you agree with that option.**
- A) Yes, the sector can absorb those that are unemployed and poverty-stricken, and subsequently better the quality of their lives.
- B) No, the sector does not pay well so being employed in the sector will not necessarily mean that you are out of the poverty trap.
- C) Yes, but there would need to be meaningful participation in the sector, as opposed to being a farm worker and earning a minimum wage.
- D) No, there are other sectors (e.g. mining) that have a much larger impact in alleviating poverty than agriculture.
- E) A & C

The end

Thank you for your time and valuable contribution to my study.

Regards,

ML Mama

Appendix 2: Results

		Gender		Race				Education				Location		
		Male	Female	Black	White	Indian	Coloured	NQF level 1-4	NQF level 5	NQF level 6	NQF level 7	Gauteng, Johannesburg and Pretoria	Eastern Cape, East London, Grahamstown and Alice	Western Cape, Cape Town and Stellenbosch
1)	Yes	1	0	0	1	0	0	0	0	1	0	0	0	1
	No	171	75	166	59	6	15	5	85	154	2	195	22	29
2)	A	65	40	78	12	5	10	5	10	90	0	91	4	10
	B	19	5	12	12	0	0	0	14	10	0	21	1	2
	C	3	0	3	0	0	0	0	3	0	0	3	0	0
	D	15	10	2	23	0	0	0	7	18	0	3	5	17
	E	15	3	0	13	0	5	0	1	15	2	8	9	1
	F	55	17	71	0	1	0	0	50	22	0	69	3	0
3)	A	70	40	60	38	4	8	3	35	70	2	101	3	6
	B	10	9	11	4	2	2	1	5	13	0	18	0	1
	C	5	2	5	2	0	0	0	0	7	0	7	0	0
	D	2	3	1	4	0	0	0	2	3	0	0	2	3
	E	18	4	17	5	0	0	0	4	18	0	13	2	7
	F	1	3	0	4	0	0	0	2	2	0	1	1	2
	G	20	2	14	3	0	5	1	15	6	0	11	8	3
	H	30	1	31	0	0	0	0	15	16	0	22	6	3
		10	1	11	0	0	0	0	4	7	0	9	0	2
	J	6	10	16	0	0	0	0	3	13	0	13	0	3
4)	0-3%	54	23	45	26	3	3	4	34	38	1	25	22	30

	4-8%	102	44	100	33	3	10	1	49	96	0	146	0	0
	9-20%	16	8	21	1	0	2	0	2	21	1	24	0	0
5)														
A	Yes	172	75	166	60	6	15	5	85	155	2	195	22	30
	No	0	0	0	0	0	0	0	0	0	0	0	0	0
B	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	172	75	166	60	6	15	5	85	155	2	195	22	30
C	Yes	172	75	166	60	6	15	5	85	155	2	195	22	30
	No	0	0	0	0	0	0	0	0	0	0	0	0	0
D	Yes	165	66	155	58	5	13	2	79	146	2	186	18	27
	No	7	9	11	2	1	2	3	6	7	0	9	4	3
E	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	172	75	166	60	6	15	5	85	155	2	195	22	30
F	Yes	172	75	166	60	6	15	5	85	155	2	195	22	30
	No	0	0	0	0	0	0	0	0	0	0	0	0	0
G	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	172	75	166	60	6	15	5	85	155	2	195	22	30
H	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	172	75	166	60	6	15	5	85	155	2	195	22	30
I	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	172	75	166	60	6	15	5	85	155	2	195	22	30
J	Yes	168	74	163	60	6	13	1	84	155	2	190	22	30
	No	4	1	3	0	0	2	4	1	0	0	5	0	0
K	Yes	70	71	71	59	0	11	1	40	98	2	90	22	29
	No	102	4	95	1	6	4	4	45	57	0	105	0	1
6)														
A		0	0	0	0	0	0	0	0	0	0	0	0	0
B		92	36	112	16	0	0	1	36	90	1	94	15	19
C		77	33	54	35	6	15	3	43	64	0	92	7	11

	D	3	6	0	9	0	0	1	6	1	1	9	0	0
7)	A	0	0	0	0	0	0	0	0	0	0	0	0	0
	B	16	63	21	55	1	2	2	9	66	2	33	21	25
	C	156	12	145	5	5	13	3	76	89	0	162	1	5
8)	A	24	11	22	4	2	7	1	21	13	0	28	2	5
	B	65	26	63	21	3	4	4	32	55	0	66	15	10
	C	12	16	5	20	0	3	0	12	16	0	25	1	2
	D	60	22	75	6	1	0	0	15	67	0	68	4	10
	E	11	0	1	9	0	1	0	5	4	2	8	0	3